JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT, SOLAN

1.3.4

(Percentage of Students undertaking Field Projects/ Internships)

The Sequence of Proofs is as follows:

I. Department of Computer Science & Engineering and Information Technology

II. Department of Electronics and Communication Engineering

III. Department of Biotechnology & Bioinformatics

IV. Department of Civil Engineering

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
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WAKNAGHAT

Field Projects

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

CERTIFICATE

This to ensure that the work set out in the project report entitled " Internhip on Patent Ssearching and Analysis" presented to the Department of Electronics and Communication Engineering to fulfill the part of the B.Tech award requirements for Electronics and Communication Engineering is accurate. Jaypee University of Information Technology, Waknaghat accurate record of work done by Priyank Srivastava (181001) under the direction of Lt. Pragya Gupta Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat between Janurary 2022 to May 2022.

Priyank Srivastava (181001)

This is to certify that the above statement made by candidate is true to the best of my knowledge.

31/5/2022

Supervisor Name: Lt. Pragya Gupta

Department of Electronics and Communication Engineering

Jaypee University of Information Technology, Waknaghat

Assistant Registrar
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
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JAYPEE UNIVERSITY OF INFORMATIO TECHNOLOGY

(Established by H.P. State Legislative vide Act No. 14 of 2002)
P.O. Waknaghat, Teh. Kandaghat, Distt. Solan - 173234 (H.P.) INDIA
Website: www.juit.ac.in
Phone No. (91) 01792-257999
Fax: +91-01792-245362

CERTIFICATE

This is to certify that the work reported in the B.Tech. project report entitled **"DETECTION OF DIABETIC RETINOPATHY USING DIGITAL IMAGE PROCESSING"** which is being submitted by **Vinayak Tiku** in fulfillment for the award of Bachelors of Technology in Electronics and Communication Engineering by the Jaypee University of Information Technology, is the record of candidate's own work carried out by him under my supervision. This work is original and has not been submitted partially or fully anywhere else for any other degree or diploma.

30/5/22

Prof. (Dr.) Shruti Jain

Professor
Department of Electronics & Communication Engineering
Jaypee University of Information Technology, Waknaghat
Solan, Himachal Pradesh, India.

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

UNIVERSITY OF INFORMATION TECHNOLOGY
juit
विद्या तत्व ज्योतिसमः

Certificate

Candidate's Declaration

I hereby declare that the work presented in this training report for company " **RTDS** "in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Information technology and Engineering submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to May 2022 under the supervision of Prateek karna (Product & development Team Lead) .

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Student Name: Harsh Mishra

Roll no.: 181006

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervisor Name: Prof. Dr Sumedha Arora

Designation: Assistant Professor (SG)

Department name: Computer Science and Engineering

Dated: 27th May 2022

Supervisor Name: Prateek karna

Designation: SDM (Product & development Team Lead)

Department name: Product & development

Dated: 27th May 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT • H.P.

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled "**IOT Based Robot For Military Applications**" submitted at Jaypee University of Information Technology, Waknaghat, India is an authentic record of our work carried out under the supervision of **Dr. Rajiv Kumar** We have not submitted this work elsewhere for any other degree or diploma.

Aditya Kumar Jaiswal (181007)

Avinash Verma (181019)

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Signature of the Supervisor

Name of the Supervisor

Dr. Rajiv Kumar

Date: 31/05/2022

31/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled "CONTENT AWARE IMAGE RESIZING USING CNN" submitted at Jaypee University of Information Technology, Waknaghat, India is an authentic record of our work carried out under the supervision of Dr. Harsh Sohal. We have not submitted this work elsewhere for any other degree or diploma.

ARSH KUMAR
181008

TAVLEEN SINGH
181025

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Dr. Harsh Sohal
Date: 27-May-2022

31/05/2022
Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CANDIDATES DECLARATION

I hereby declare that the work presented in this report entitled **"Internship Report"** in partial fulfillment of the requirements for the award of the degree **of Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2021 to May 2021 under the supervision of Mr. Rishabh Gupta.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Gurpreet Singh (181009)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mr. Rishabh Gupta
Dated: 21/05/21

Assistant
Jaypee
Waknaghat

CERTIFICATE

This is to certify that the content of this project entitled **"IOT Social Distancing And Monitoring Robot For Queue"** by Surbhi Kumari and Kirti Parshionikar is their project work carried out under my supervision, of the Electronics and Communication branch at Jaypee University Of Information Technology, Solan, HP in the academic year 2021-22 for the fulfillment of the requirements of B. Tech Major Project.

This work has not been submitted partially or wholly to any other university or institute of award of this or any other degree or diploma.

Signature of the Supervisor

Dr. Vikas Baghel

Department of Electronics and Communication Engineering,

Jaypee University Of Information Technology,

Waknaghat,Solan,H.P.

INDIA

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Web Application for Text Classification "** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Mr. Pankaj Kumar.** We have not submitted this work elsewhere for any other degree or diploma.

Aditya Mishra
181023

Kartikay Kaushal
181011

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Mr. Pankaj Kumar

Date: 30-05-2022

Head of the Department/Project Coordinator

Date: 30/05/2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Classification Of Mushroom's Into Edible Or Poisonous Using ML"** submitted at **Jaypee University of Information Technology,Waknaghat, India** is an authentic record of our work carried out under the supervision of **Dr. Alok Kumar** . We have not submitted this work elsewhere for any other degree or diploma.

Nikhil Thakur (181012)

Himanshu Thakur (181022)

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Dr. Alok Kumar 30/05/2022

Date:

30/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **"Liver Ultrasound Image segmentation using Markov Random field"** submitted at the **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out underthe supervision of **"Dr. Nishant Jain"**. I have not submitted this work elsewhere for any other degree or diploma.

Name: Nikhil Yadav

Roll No.: 181013

This is to certify that the above statement made by the candidates is correct to the best of myknowledge.

Nishant

Dr. Nishant Jain

Date: 28th May 2022

31/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

DECLARATION

We hereby declare that the work presented in the report entitled **"ARDUINO BASED FACE MASK DETECTION"** submitted at **Jaypee University Of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of Mr. Munish Sood. We have not submitted this work elsewhere for any other degree or diploma.

Signature Kshitij Sharma(181017) Kshitij

Signature Sanyam Gupta (181014) SANYAM GUPTA

This is to certify that the above statement made by the candidates is correct to the best of myknowledge.

Signature
Mr. Munish Sood
Date : 30/05/2022

30/05/2022

Signature
Head of the Department/Project Coordinator

Assistant Registrar (A...)
Jaypee University of ...
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

DECLERATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Hardware Acceleration of Machine Learning Using FPGA"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Mr. Anuj Kumar Maurya.** We have not submitted this work elsewhere for any other degree or diploma.

Rakshit Sharma

181015

Raghav Sharma

181028

This is to certify that the above statement made by the candidates is correct to the best of my knowledge .

Mr. Anuj Kumar Maurya

Date: 30.05.2022

30/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

DECLARATION

I hereby declare that the work reported in the B. Tech Project Report entitled **"Deep Learning Approach using CNN for Handwritten Character Recognition"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of my work carried out under the supervision of Dr. Pardeep Garg. I have not submitted this work elsewhere for any other degree or diploma.

Kamlesh Kumar

Kamlesh Kumar

181016

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

28/05/22

Dr. Pardeep Garg

Date: 28/05/2022

30/05/2022

Prof. Rajiv Kumar

Head of the Department

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled "**IOT Based Robot For Military Applications**" submitted at Jaypee University of Information Technology, Waknaghat, India is an authentic record of our work carried out under the supervision of **Dr. Rajiv Kumar** We have not submitted this work elsewhere for any other degree or diploma.

Aditya Kumar Jaiswal (181007)

Avinash Verma (181019)

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Signature of the Supervisor

Name of the Supervisor

Dr. Rajiv Kumar

Date: 31/05/2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

31/05/2022

Head of the Department/Project Coordinator

IQAC

DECLARATION

We hereby declare that the work presented in the report entitled **"ARDUINO BASED FACE MASK DETECTION"** submitted at **Jaypee University Of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of Mr. Munish Sood. We have not submitted this work elsewhere for any other degree or diploma.

Signature Kshitij Sharma(181017) Kshitij

Signature Sanyam Gupta (181014) SANYAM GUPTA

This is to certify that the above statement made by the candidates is correct to the best of myknowledge.

Signature
Mr. Munish Sood
Date : 30/05/2022

30/05/2022

Signature
Head of the Department/Project Coordinator

Assistant Registrar
Jaypee University of
Waknaghat, Distt. Solan

Scanned with CamScanner

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"GESTURE CONTROLLED ROBOTIC ARM"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Electronics and Communication submitted to the Department of Electronics and Communication Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **MUDIT KATIYAR (181020)** during a period from July 2021 to May 2022 under the supervision of **Dr. EMJEE PUTHOORAN (Associate Professor)**, Department of Electronics and Communication, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Date: 31/05/22

Dr. Emjee Puthooran

Associate professor

Department of Electronics and Communication

JUIT, Waknaghat

Date: 31/05/22

Dr. Rajiv Kumar

31/05/2022

Professor & Head of Department

Department of Electronics and Communication

JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Classification Of Mushroom's Into Edible Or Poisonous Using ML"** submitted at **Jaypee University of Information Technology,Waknaghat, India** is an authentic record of our work carried out under the supervision of **Dr. Alok Kumar** . We have not submitted this work elsewhere for any other degree or diploma.

Nikhil Thakur (181012)

Himanshu Thakur (181022)

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Alok Kumar 30/05/2022

Dr. Alok Kumar

Date:

30/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • SOLAN
IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Web Application for Text Classification "** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Mr. Pankaj Kumar.** We have not submitted this work elsewhere for any other degree or diploma.

Aditya Mishra
181023

Kartikay Kaushal
181011

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Mr. Pankaj Kumar

Date: 30-05-2022

Head of the Department/Project Coordinator

Date: 30/05/2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
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WAKNAGHAT

CERTIFICATE

This is to certify that the content of this project entitled **"IOT Social Distancing And Monitoring Robot For Queue"** by Surbhi Kumari and Kirti Parshionikar is their project work carried out under my supervision, of the Electronics and Communication branch at Jaypee University Of Information Technology, Solan, HP in the academic year 2021-22 for the fulfillment of the requirements of B. Tech Major Project.

This work has not been submitted partially or wholly to any other university or institute of award of this or any other degree or diploma.

Signature of the Supervisor

Dr. Vikas Baghel

Department of Electronics and Communication Engineering,

Jaypee University Of Information Technology,

Waknaghat,Solan,H.P.

INDIA

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled "CONTENT AWARE IMAGE RESIZING USING CNN" submitted at Jaypee University of Information Technology, Waknaghat, India is an authentic record of our work carried out under the supervision of Dr. Harsh Sohal. We have not submitted this work elsewhere for any other degree or diploma.

ARSH KUMAR
181008

TAVLEEN SINGH
181025

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Dr. Harsh Sohal
Date: 27-May-2022

31/05/2022
Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Analysis of Machine Learning Models in Breast Cancer Detection"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Dr. Naf is Uddin Khan.** We have not submitted this work elsewhere for any other degree or diploma.

Signature of Student: Vaibhav R. 30/5/2022

Vaibhav Rastogi

181027

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Signature of the Supervisor: 30/5/2022

Dr. Naf is Uddin Khan

Date:

30/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY IQAC WAKNAGHAT

DECLERATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"Hardware Acceleration of Machine Learning Using FPGA"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Mr. Anuj Kumar Maurya.** We have not submitted this work elsewhere for any other degree or diploma.

Rakshit Sharma

181015

Raghav Sharma

181028

This is to certify that the above statement made by the candidates is correct to the best of my knowledge .

Mr. Anuj Kumar Maurya

Date: 30.05.2022

30/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled ''**Analysis of Machine Learning Techniques for HUMAN ACTIVITY RECOGNITION**'' submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Dr. Sunil Datt Sharma**.We have not submitted this work elsewhere for any other degree or diploma.

Signature of Student

Adarsh

181029

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

31/05/22

Signature of the Supervisor

Dr. Sunil Datt Sharma

Date: 31/05/22

31/05/2022

Head of the Department/Project Coordinator

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P.
IQAC

CERTIFICATE

This certificate is given to Akhilesh to successfully submit the internship report on the topic "Handson project and .NET Training" under the Department of Computer Science & Engineering and Information Technology for the academic year 2022 in the company Cognizant.

Submitted by:

Akhilesh

181201

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology

Vivek Kumar Sehgal

Head of the Department

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Data hiding using Image Steganography" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Ankush Kashyap (181202), Parul Damalu (181454)" during the period from January 2022 to May 2022 under the supervision of **Dr. Kapil Sharma**, Assistant Professor (Senior Grade), Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Ankush Kashyap
(181202)

Parul Damalu
(181454)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervised by:

17-05-22

Dr. Kapil Sharma
Assistant Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

I hereby declare that the work presented in this report entitled Key Dumping Keylogger in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of**Dr. Pankaj Dhiman**Assistant Professor(Grade-II) Computer Science & Engineering and Information Technology

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Prikshit Thakur (181203)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Pankaj Dhiman
Assistant Professor(Grade-II)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

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DECLARATION

We hereby declare that; this project has been done by our group under the supervision of Dr.Kapil Sharma, Jaypee University of Information Technology. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

26-05-22

Supervised by:
Dr.Kapil Sharma
Assistant Professor (SG)
(Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology)

Submitted by:
Nikhil Naresh (181430)
Miguel Kundal (181204)
(Computer Science & Engineering Department
Jaypee University of Information Technology)

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled "Parkinson's Disease Detect" is in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of Dr. Jagpreet Sidhu Assistant Professor (SG) Department of Computer Science and Engineering.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

ULLAS KUMAR BHERAV

Ullas Kumar Bherav, 181205

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

14/05/2022

(Supervisor Signature)

Dr. Jagpreet Sidhu

Assistant Professor (SG)

Computer Science and Engineering

Dated:

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P.
IQAC

DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except wheredue acknowledgement has been made in text.

Date: 30 May 2022

Name:
Prakhar Pandey

Enroll. No:
181206

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

Candidate's Declaration

We hereby declare that the work presented in this report entitled " **Gender and Age Detection**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Amol Vasudeva** (Assistant Professor (Senior Grade) , Department of Computer Science & Engineering and Information Technology Jaypee University of Information Technology). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Akshat

Akshat Agrawal, 181207.

Sahil Thakur, 181221.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Amol Vasudeva
Designation
Assistant Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology
Dated:- 29-05-2022

Assistant Registrar (Academics)
University of Information Technology
Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

CERTIFICATE

This is to certify that the work which is being presented in the "Internship report" is in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Muskan Thakur(181208) during the period from February 2022 to June 2022 under the supervision of Ms Himanshi Chawla, Paymentus Corporation, Delhi.

Muskan

Muskan Thakur (181208)

The above statement made is correct to the best of my knowledge.

Himanshi Chawla

Ms. Himanshi Chawla
Software Developer
Paymentus Corporation, Delhi

31/5/2022

(JAGPREET)
Dr. Jagpreet Sidhu
Assistant Professor S.G.
Computer Science & Engineering
Jaypee University of
Information & Technology.

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

DECLARATION

I hereby declare that the work presented in this report entitled "Save++" in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out at **Hashedin By Deloitte**-A service based company over a period from **March 2022 to May 2022** under the supervision of **Dr. Ruchi Verma** (Assistant Professor (SG), Dept. CSE & IT) and **Vatsal Mahendra** (Functional Analyst at Hashedin By Deloitte , Dept. Product Delivery).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Apurva Dubey

Apurva Dubey, 181209

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Ruchi 31/5/22

Dr. Ruchi Verma
Assistant Professor (SG)
Dept. CSE & IT

Assistant Registrar (A...
Jaypee University of ...
Waknaghat, Distt ...

Vatsal

Vatsal Mahendra
Functional Analyst
Dept. Product Delivery

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **Cloud Based Bus Pass System** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **Dr. Jagpreet Sidhu, Assistant Professor (SG).**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kanishka Narang,
181210.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Jagpreet Sidhu
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,
Dated: 15 May 2022

Certificate

I hereby declare that the work presented in this report entitled " **MVC Architecture and it's Applications**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **Dr. Yugal Kumar,** Associate Professor, Computer science.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student signature)
Student Name:
Palak Rustagi
Roll no. :
181212

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(College Supervisor Signature)

(Company Supervisor Signature)

Supervisor Name:

Supervisor Name:
Dr. Yugal Kumar
Designation:
Associate Professor
Department name :
Computer science
Dated:

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

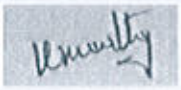
Certificate

I hereby declare that the work presented in this report entitled "Networking Automation" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to July 2022 under the supervision of Mr Murthy Satya K, Manager - QA Department of Engineering(Cloud Quality and Reliability).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Aman Kumar Rawat

Aman Kumar Rawat, 181213

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



(Supervisor Signature) Mr. Murthy Satya K, Manager - QA

Computer Science and Engineering Dated: 28/05/22

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Big Data and PySpark Training"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from March 2022 to May 2022 under the supervision of **Dr. Amol Vasudeva**, Assistant Professor, Senior Grade, Department of Computer Science and Engineering.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Amolik V. Paul

Amolik Vivian Paul (181214)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Amol Vasudeva
Assistant Professor (Senior Grade)
Computer Science and Engineering Department

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled " RECOMMENDATION SYSTEM USING MACHINE LEARNING " in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of Dr. Jagpreet Sidhu, Assistant Professor Senior Grade Computer Science and Engineering/ Information Department. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Hiteshwar Singh 181223

Harshita Sharma 181215

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

16/5/2022

Dr. Jagpreet Sidhu
Assistant Professor Senior Grade
Computer Science and Engineering/ Information Department
Dated:

Certificate

I hereby declare that the work presented in this report entitled " Rush App Android automation" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2022 to May 2022 under the supervision of Dr. Jagpreet Sidhu Assistant Professor(SG) Department of Computer Science and Engineering.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

YASH GOYAL
Yash Goyal, 181216

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature) Dr. Jagpreet Sidhu Assistant Professor(SG)
Computer Science and Engineering Dated: 02/06/22

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled "SHIPPING SERVICES" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2022 to May 2022 under the supervision of **Dr Jagpreet Sidhu** (Assistant Professor(SG) CSE).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Tushar

(Student Signature)

Tushar

Gupta,181217

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

30/5/2022

(College Supervisor Signature)

Dr Jagpreet Sidhu

Assistant

Professor(SG)

CSE

Dated:

Ashna

(CompanySupervisor

Signature)

Ashna Arora

Team Lead

Web

Development

Dated:

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Credit Card Fraud Detection" in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Kautilya Sharma during the period from January 2022 to May 2022 under the supervision of Dr. Jagpreet Sidhu, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Kautilya Sharma 181218

The above statement made is correct to the best of my knowledge.

16/05/2022

Dr. Jagpreet Sidhu
Assistant Professor S.G.
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

This is to certify that the project which is being represented in the project report named "School data management" in partial fufilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineeringand represented to the Department of Computer Science and Engineerin(CSE), Jaypee University of Information Technology, Waknaghatis an authentic record of work done by Aryan Datta (181219) during the period from January 2022 to May 2022 under the superviision of Dr Monica Bharti, Department of Computer Science and Engineering, Jaypee Universityof Information Technology, Waknaghat.

Aryan Datta 181219

The above statement made is correct to the best of my knowledge.

29.05.22

Dr. Monika Bharti
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Solan (H.P.)

Certificate

I hereby declare that the work presented in this report entitled " **Covid Seating** " in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from March 2022 to May 2022 under the supervision of **(Dr Pradeep Kumar Gupta)** (Associate Professor, Department of Computer Science and Technology).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Prajwal

(Student Signature)
Prajwal Sharma,
181220

Signature (Dr. P.K. Gupta)

Dr. Pradeep Kumar Gupta

Assistant Professor (SG)

Computer Science

Dated:

signature G. Divyasree

Gopali Divyasree

DC Functional Analyst

HashedIn by Deloitte

Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Dist. Solan (H.P.)

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

Candidate's Declaration

We hereby declare that the work presented in this report entitled " **Gender and Age Detection**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Amol Vasudeva** (Assistant Professor (Senior Grade) , Department of Computer Science & Engineering and Information Technology Jaypee University of Information Technology). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Akshat

Akshat Agrawal, 181207.

Sahil Thakur, 181221.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Amol Vasudeva
Designation
Assistant Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology
Dated:- 29-05-2022

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled " RECOMMENDATION SYSTEM USING MACHINE LEARNING " in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of Dr. Jagpreet Sidhu, Assistant Professor Senior Grade Computer Science and Engineering/ Information Department. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Hiteshwar Singh 181223

Harshita Sharma 181215

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

16/5/2022

Dr. Jagpreet Sidhu
Assistant Professor Senior Grade
Computer Science and Engineering/ Information Department
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

DECLARATION

I hereby declare that this project has been done by me under the supervision of (Dr. Pankaj Dhiman, Assistant Professor (Grade-II)), the Jaypee University of Information Technology. I also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

Supervised by:

Dr. Pankaj Dhiman

Assistant Professor (Grade-II)

Department of Computer Science & Engineering and Information Technology

Jaypee University of Information Technology

Submitted by:

Ayush Soni 181224

Computer Science & Engineering Department

Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

Scanned with CamScanner

II

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Credit Card Fraud Detection" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Sahil Dhiman (181226)" under the supervision of Dr. Ravindara Bhatt, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Sahil Dhiman

Sahil Dhiman (181226)

The above statement made is correct to the best of my knowledge.

01.06.2022

Dr. Ravindara Bhatt

Associate Professor,

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat,

IQAC

Assistant Registrar (Academics)

Jaypee University of Information Technology

Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This certificate is given to Ayush Shukla to successfully submit the internship report on the topic "Mediclaim: Claim Management Service" under the Department of Computer Science & Engineering and Information Technology for the academic year 2022 in the company Cognizant - India.

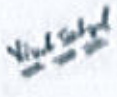
Submitted by:

Ayush Shukla

181227

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology



Vivek Kumar Sehgal

Head of the Department

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**GoLang - Three Layered Architecture**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to July 2022 under the supervision of **Dr. Himanshu Jindal** (Assistant Professor (SG), Dept. CSE & IT).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

For - Rashi Singh -

Rashi Singh, 181228

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Himanshu Jindal
Assistant Professor (SG)
Dept. CSE & IT
Technologies

Maitreyi Bilugu
Senior Lead Engineer
ZopSmart

Assistant Registrar (Academics)

CERTIFICATE:

I hereby declare that the work presented in this report entitled **"Applications of Data Analytics in Clinical Trial site Feasibility and Optimization"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of Dr. **Yugal Kumar** Associate Professor, CSE.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Garima

Garima Singh

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

30/05/2022

(College Supervisor Signature)

Dr. Yugal Kumar

Associate Professor

Computer Science

Dated:

Ishita

Ishita Srivastava

Consultant

KM

Dated: 25/5/22

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

DECLARATION

We hereby declare that this project has been done by us under the supervision of **DR PARDEEP KUMAR KHOKHAR, PROFESSOR,** Jaypee University of Information Technology. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Pardeep Kumar Kh. 16/05/2022

Supervised by:

(DR PARDEEP KUMAR KHOKHAR)

PROFESSOR

Department of Computer Science & Engineering and Information Technology

Jaypee University of Information Technology

Submitted by:

(SUNNY MITTAL) (181230)

(KARTIK GUPTA) (181290)

Computer Science & Engineering Department

Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

This certificate is given to Bhawna Dey to successfully submit the internship report on the topic "Adam Chatbot Extension" under the Department of Computer Science & Engineering and Information Technology for the academic year 2022 in the company Paxcom India (P) Ltd - A Paymentus Company, Delhi.

Submitted by:

Bhawna Dey

181231

Computer Science & Engineering and Information Technology Department

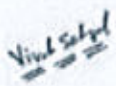
Jaypee University of Information Technology

Supervised by:

Sunil Garg

Senior Software Engineer

Paxcom India (P) Ltd - A Paymentus Company, Delhi



Vivek Kumar Sehgal

Head of the Department

Computer Science & Engineering and Information Technology Department

Jaypee University of Information Technology

CERTIFICATE

This certificate is given to Parthh Dikshit to successfully submit the internship report on the topic "Handson project and Azure Training" under the Department of Computer Science & Engineering and Information Technology for the academic year 2022 in the company Cognizant.

Submitted by:

Parthh Dikshit

181233

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology

Vivek Kumar Sehgal

Head of the Department

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

CERTIFICATE

This is to certify that the project which is being represented in the project *report named "Movement Tracker" in partial fulfilment of the requirements* for the award of the degree of B.Tech in Computer Science And Engineering and represented to the Department of Computer Science and Engineerin(CSE), Jaypee University of Information Technology, Waknaghat is an authentic record of work done by Aakarsh Gupta (181232) during the period from January 2022 to May 2022 under the superviision of Dr Monica Bharti, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Aakarsh Gupta 181232

The above statement made is correct to the best of my knowledge.

Monika Bharti

Dr. Monika Bharti
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Classical Music Generation using Recurrent Neural Network"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Rajni Mohana** (Associate Prof. in CSE department).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Priyanshu Sharma, 181234

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Rajni Mohana
Associate Professor
Computer Science
Dated: 18-05-2022

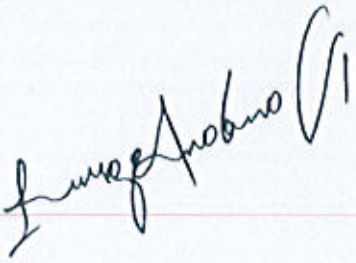
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Maintenance Learning Management System"** in the fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, Solan is an authentic record of work carried out by **Nandan Agarwal (181235)** under the supervision of **Mr. Parv Tiwari (SDE Manager)**, Testbook Pvt Ltd. Mumbai, India.

NANDAN AGARWAL 181235



The above statement made is correct to the best of my knowledge.

Mr. Parv Tiwari
Lead FullStack Developer
Testbook Pvt Ltd.

Dr. Ruchi Verma
Associate Professor (Grade - I) (Dept. CSE)
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

Candidate's Declaration

I hereby declare that the work presented and done in this document entitled "Integrated Account Management" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology, Waknaghat is an authentic record of our own work carried out over a period from Feb 2022 to May 2022 under the supervision of Mr. Subhash Nadkarni and Dr. Rajni Mohana (Faculty, Computer Science and Engineering And Information Technology)

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vikal Choudhary, 181236

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Rajni Mohana

Mr. Subhash Nadkarni

Consultant (ZS)

Dated: 28/05/2022

Assistant Registrar (Academics)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "DigitalMarketing Casestudy Digitalinclined " in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Sudhanshu Shridhar (181237)" during the period from August 2021 to December 2021 under the supervision of Prof. Ruchi Verma, Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat.

Supervised by:

(Dr Ruchi Verma)

Associate Professor (CSE/IT)

Department of Computer Science & Engineering and Information Technology

Jaypee University of Information Technology

Submitted by:

(Sudhanshu Shridhar)

(181237)

Computer Science & Engineering Department

Jaypee University of Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan

CERTIFICATE

I hereby declare that the work presented in this report entitled **"Medical Assistance Application"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering and Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(Dr. Jagpreet Sidhu)** (Assistant Professor S.G of Department of Computer Science & Engineering/Information Technology).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Tarankit Chadha
181239

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Jagpreet Sidhu
Assistant Professor S.G.
Department of Computer Science & Engineering and Information Technology
Dated:

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY IQAC WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Sales Prediction using ARIMA model" is in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Shaurya Pratap Singh and Shubham Tanodn during the period from January 2022 to May 2022 under the supervision of MR. Deepak Kumar Gupta , Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Shaurya Pratap Singh(181492)

Shubham Tandon(181240)

The above statement made is correct to the best of my knowledge.

Assistant
Jaypee University
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I hereby declare that the work presented in this report entitled "MOVIE RECOMMENDATION SYSTEMS" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering**submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Wakanaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr Rakesh Kanji** (Assistant Professor(SG)).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Aakash
181241

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr Rakesh Kanji
Assistant Professor
Computer Science & Engineering
Dated: 13/05/2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

I hereby declare that the work presented in this report entitled " **Dataxplorer Using Data Science**" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Prof. Dr. Vivek Kumar Sehgal** Head Of Department Of CSE & IT.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Astha Kapil (181242)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

17/5/22

Prof. Dr. Vivek Kumar Sehgal
Head Of Department
CSE & IT

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "TASC iOS Apps" in the fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, Solan is an authentic record of work carried out by **Abhishek Gupta (181243)** under the supervision of Mr. Narendran Anil (Engineering Manager), Zopsmart Technologies, Bangalore, India.

Abhishek.
ABHISHEK GUPTA
181243

The above statement made is correct to the best of my knowledge.

Vipul Sharma
31/05/2020

Assistant Registrar (Academics)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Spell Correction"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **(Dr. Rakesh Kanji)** (Assistant Professor(SG), Department of Computer Science and Information Technology).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Anubhav Thapa(181286)

&

Aashish Chauhan(181244)

Anubhav (181286) (181244)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Rakesh

(Supervisor Signature)

Supervisor Name :Dr. Rakesh Kanji

Designation: Assistant Professor

Department name :Department of Computer Science and Information Technology

Dated:

Assistant Registrar (Academics)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " **SELF DRIVING AUTONOMOUS VEHICLE**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Vipul kumar Sharma**(Assistant Professor in Computer Science).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Anil Kushwaha, 181245.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

31/05/2022

(Supervisor Signature)
Dr. Vipul Kumar Sharma
Assistant Professor
Computer Science
Dated:25/05/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled "SPEECH EMOTION BASED RECGOGNITION SYSTEM" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of ComputerScience & Engineering and Information Technology, Jaypee University ofInformation Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of Dr. Surjeet Singh Assistant Professor(SG) Department of Computer Science and Engineering.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

SALONI SINGH

Saloni Singh (181246)

This is to certify that the above statement made by the candidate is true to the bestof my knowledge.

29/05/2022

(SupervisorSignature)

Dr. Surjeet Singh

Assistant

Professor(SG)

Computer Science

andEngineering

Dated:

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " **CREDIT CARD FRAUD DETECTION**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August2021 to May 2022 under the supervision of **Amit Jhakkar** (Assistant Professor in Computer Science).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ritik Srivastava, 181247.

Akshat Agarwal, 181253.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Amit Kumar Jhakkar
Assistant Professor
Computer Science
Dated:15/05/2022

CERTIFICATE

This is to certify that **Mr. ALOK PRATAP SINGH** of **Jaypee University of Information Technology** has successfully completed the project work titled **"Healthcare Using Machine Learning"** as a partial fulfilment of the requirement for the degree of Bachelor of Technology.

This Project report is the record of authentic work carried out by him during the educational period from 18th August 2021 to May 2022.

All help received by him from various sources are duly acknowledged. No part of this report has been submitted elsewhere. He has worked under my guidance.

Rakesh Kanji

(Dr. Rakesh Kanji)
Assistant professor
Supervisor

IQAC

Date: May 23rd, 2022
Ref. No. GB- HR/TR- 220

TRAINING CERTIFICATE

This is to certify that Shreya Jayant is working with our organization from Feb 9th, 2022 to till date as a Trainee – Research Analyst.

During her internship, she has been working on various project for Research Services.

Due to confidentiality concerns we are not be able to disclose the project details.

This document is confirming her internship with us.

Regards,

Pooja Sehgal
Human Resources

IQAC

GreyB Research Pvt. Ltd.
Quark Atrium, A-45, GF, Zone A, Industrial Area, Phase 8B, Mohali, Punjab 160059
info@greyb.com www.greyb.com 8427102546

Certificate of Originality

This is to certify that the work which is being presented in the project report titled Steganography of images in completion of the requirements for the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Akshit Jain(181250) during the period from January 2022 to May 2022 under the supervision of Mr. Deepak Gupta, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Akshit Jain(181250)

The above statement made is correct to the best of my knowledge.

21/05/22

Deepak Gupta

Asst. Prof.

CSED, JUIT Waknaghat.

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled "**Deep Analysis and Diagnosis of Covid-19 using Machine learning**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from July 2021 to May 2022 under the supervision of **Dr. Ekta Gandotra** (Assistant Professor, Senior Grade, Computer science and engineering/Information Technology department). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kritika Shelly, 181251.

Divya Sharma, 181254.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

14/5/22

Dr. Ekta Gandotra

Assistant Professor, Senior Grade

Computer science and engineering/Information Technology department

Dated: 14th May, 2022.

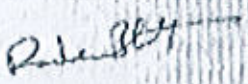
Assistant Registrar (Academics)
Jaypee University of Information Technology

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"RASA CHATBOT"** in fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out during the period from February 2022 to May 2022 under the supervision of **Dr. Ravindara Bhatt**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Nandini Ahuja
(181252)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



(College Supervisor Signature)
Supervisor Name: Dr. Ravindara Bhatt
Designation: Assistant Professor
Department name: Department of Computer Science and Information Technology
Dated: 27/05/2022

Anoop Sharma

(Company Supervisor Signature)
Supervisor Name: Mr. Anoop Sharma
Designation: Full Stack Developer
Department name: Web Development
Dated: 27/05/2022

Scanned with CamScanner

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " **CREDIT CARD FRAUD DETECTION**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August2021 to May 2022 under the supervision of **Amit Jhakkar** (Assistant Professor in Computer Science).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ritik Srivastava, 181247.

Akshat Agarwal, 181253.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Amit Kumar Jhakkar
Assistant Professor
Computer Science
Dated:15/05/2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • AGOLDHSIRAL SOLAN
IQAC

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled "**Deep Analysis and Diagnosis of Covid-19 using Machine learning**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from July 2021 to May 2022 under the supervision of **Dr. Ekta Gandotra** (Assistant Professor, Senior Grade, Computer science and engineering/Information Technology department). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kritika Shelly,181251.

Divya Sharma,181254.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

14/5/22

Dr. Ekta Gandotra

Assistant Professor, Senior Grade

Computer science and engineering/Information Technology department

Dated: 14th May, 2022.

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled "**Smart Monitoring Of Three Farm Laws Using Twitter**" in partialfulfilment of the requirements for the award of the degree of Bachelor of Technology inComputer Science and Engineering/Information Technology submitted in the department ofComputer Science &; Engineering and Information Technology, Jaypee University of InformationTechnology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Mr. Surjeet Singh,Assistant Professor(Grade II).**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vardhan Agarwal
181255

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

11/05/2022

Mr. Surjeet Singh
Assistant Professor(Grade II)
Computer Science & Engineering
Jaypee University of Information Technology, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, P.O. Solan (H.P.)

CERTIFICATE

This is to certify that the project which is being represented in the project report named "School data management" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineeringand represented to the Department of Computer Science and Engineerin(CSE), Jaypee University of Information Technology, Waknaghatis an authentic record of work done by Harshit Chanana (181256) during the period from January 2022 to May 2022 under the superviision of Dr Monica Bharti, Department of Computer Science and Engineering, Jaypee Universityof Information Technology, Waknaghat.

Harshit Chanana 181256

The above statement made is correct to the best of my knowledge.

Indrayani Sharad Project Lead(Infosys)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

CERTIFICATE

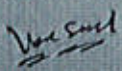
This is to certify that the work which is being presented in the project report titled "DETAILED OVERVIEW OF MACHINE LEARNING ALGORITHMS"

in partial

fulfilment of the requirements for the award of the degree of B Tech in Computer Science and Engineering submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Honey Gupta (181257)" during the period from January 2022 to May 2022 under the supervision of **Dr Vivek Kumar Sehgal**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Honey Gupta
(181257)

The above statement made is correct to the best of my knowledge.



(Dr Vivek Kumar Sehgal)
AssociateProfessor
(CS/IT)

Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled "Kidney Stone Detection using Image Processing" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of ComputerScience & Engineering and Information Technology, Jaypee University ofInformation Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of Dr. Surjeet Singh Assistant Professor(SG) Department of Computer Science and Engineering.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

NISHKARSH SHARMA
Nishkarsh Sharma, 181258

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Dr. Surjeet Singh
Assistant Professor(SG)
Computer Science and Engineering
Dated:

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Image Deblurring using CNN and its Application in Vehicle's Licence Plate Detection"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Amit Kr. Jakhar , Assistant Professor (SG)**.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

S. Ahmed

(Student Signature)

Student Name: Shazan Ahmed

Rollno.: 181259

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Supervisor Name : Dr. Amit Kumar
Designation : Assistant Professor (SG)
Department name : Computer Science & Engineering
Dated:

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I hereby declare that the work presented in this report entitled **"PHISHING WEBSITE DETECTION"** in fulfilmentof the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Mr. PrateekThakral**, Assistant Professor, department of Computer Science & Engineering and Information Technology.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

AkritiSoni, 181315

PranchalAbrol, 181260

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mr. PrateekThakral
Assistant Professor
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

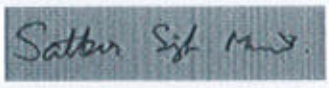
Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Paxcom Internship Report"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to June 2022 under the supervision of **Amol Vasudeva** (Assistant Professor(S.G.), Computer Science Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Aks Juneja, 181261

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



Dr. Amol Vasudeva
Assistant Professor (S.G.)
Computer Science Engineering
Dated: 25-05-2022

Mr. Satbir Singh
Senior Software Engineer
Paxcom
Dated: 25-05-2022

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Image Sharing Cloud Application"** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Ritik Bhardwaj (181262) during the period from Jan 2022 to Apr 2022 under the supervision of **Dr. Rajni Mohana**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Ritik Bhardwaj (181262)
The above statement made is correct to the best of my knowledge.

Dr. Rajni Mohana
Associate Professor
Computer Science & Engineering
Jaypee University of Information Technology, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **Image Segmentation and its Applications** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Mr. Praveen Modi Assistant Professor (Grade-1)**. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Akhil Makkar (181263)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mr. Praveen Modi
Assistant Professor (Grade-1)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

Dated: 09-05-2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

CANDIDATE DECLARATION

I hereby declare that the work presented in this report entitled "E-Pharmacy" in partial fulfillment of the requirements for the awardof the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from December 2021 to March 2022 under the supervision of Dr. Rajinder Sandhu of Computer Science And Technology.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Prabhat Rana (181423)

Kamal Singh (181264)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervisor Name: Prof. Dr. Rajinder Sandhu

Designation: Professor

Department name: Computer Science and Engineering

Dated: 2-03-2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I herewith declare that the work bestowed during this report entitled "Identity and Access Management Solutions (IAM)" is in partial fulfillment of the wants for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted within the Department of technology & Engineering, Jaypee University of data Technology Waknaghat is authentic record of my very own work allotted over a amount from February 2022 to May 2022 underneath the direction of Dr. Aman Sharma, prof, Department of Computer Science and Engineering.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Divyanshu Tewari, 181266.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Professor Aman Sharma
Assistant Professor
Department of Computer Science & Engineering
Dated: 28-May-2022

Need to be submitted Properly Joining And Report

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I hereby declare that the work presented in this report entitled " **SECURE ONLINE AUCTION SYSTEM** " in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **Dr. Jagpreet S. Sidhu,** Assistant Professor (SG), Department of Computer Science & Engineering and Information Technology.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Pranav Dabra, 181319

Ankur Rana, 181267

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

14/05/2016

Dr. Jagpreet S. Sidhu
Assistant Professor (SG)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC
Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " Compass My Meal (Food delivery app for hospital patients) " in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2022 to May 2022 under the supervision of Dr. Ravindara Bhatt, Associate Professor, Department of Computer Science and Engineering.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Nitin Thakur, 181268.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Dr. Ravindara Bhatt
Associate Professor
Department of Computer Science & Engineering
Dated: 27-May-2022

IQAC

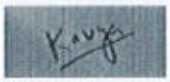
Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Data Warehousing"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology**,** Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Prof.(Dr.) Ravindara Bhatt,** Associate Professor, Department of Computer Science and Engineering.

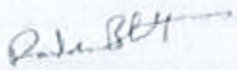
The matter embodied in the report has not been submitted for the award of any other degree or diploma.



Kavya Nagpal (181269)

Shreya Chaudhary (181279)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



(College Supervisor Signature)
Supervisor Name: Ravindara Bhatt
Designation: Associate Professor
Department name: Computer Science and Information Technology
Dated: 25th May, 2022

(Company Supervisor Signature)
Supervisor Name: Alok Choudhary
Designation: Manager
Department name: BT, ZS Associates
Dated: 25th May, 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Music Recommendation System"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **(Supervisor name)** (Designation and Department name).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Submitted by:
Aniket Katoch, 181271.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

30/05/22

Supervised by:
Deepak Gupta
Assistant Professor (SG)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology
Dated:04-12-2021

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATES DECLARATION

I hereby declare that the work presented in this report entitled "MOVIE RECOMMENDER SYSTEM USING MATRIX FACTORIZATION AND DEEP LEARNING TECHNIQUES" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of Dr. Aman Sharma, Assistant Professor (SG) Department of Computer Science & Engineering. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Sparsh Mittal , 181272

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Aman Sharma

Assistant Professor (SG)

Department of Computer Science & Engineering

Dated:

IQAC

CERTIFICATE

Candidate's Declaration

I herewith declare that the work bestowed during this report entitled "Breast Cancer Prediction Using Ensemble Learning" is in partial fulfillment of the wants for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted within the Department of technology & Engineering, Jaypee University of data Technology Waknaghat is authentic record of my very own work allotted over a amount from August 2021 to Gregorian calendar month 2021 underneath the direction of Dr. Aman Sharma, prof, Department of Computer Science and Engineering.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Divyam Goyal, 181273

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Professor Aman Sharma
Assistant Professor
Department of Computer Science & Engineering
Computer Science & Engineering and Information Technology Jaypee University of Information Technology, Waknaghat

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled **"Software Engineer – Intern – Paxcom Pvt Ltd. Mohali, Punjab"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Archit Sharma** during the said period; February 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Archit Sharma and Paxcom Pvt Ltd. Mohali, Punjab, dated 10 February, 2022.

Archit Sharma
181276
Jaypee University of Information Technology Waknaghat, Solan, H.P.

The above statement made is correct to the best of our knowledge.

Mr. Pankaj Chauhan (Sr. Software Engineer)

Mr. Shikshank Sharma (Sr. Software Engineer)

Paxcom Pvt Ltd. Mohali, Punjab.

Dr.Yugal Kumar (Assistant Professor)
Jaypee University of Information Technology Waknaghat, Solan, H.P

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Solan (H.P.)

Certificate

Candidate's Declaration

We hereby declare that the work presented in this report entitled **"Brain Stroke Prediction"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of our own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr Aman Sharma** (Assistant Professor (SG) – CSE & IT). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Mohammad Kounen Khan (181277)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr Aman Sharma

Assistant Professor (~~Grade-II~~ SG)

Department of Computer Science and Engineering & Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report titled " **BOOKBOXED – A BOOK-ORIENTED WEB APPLICATION USING FIREBASE CLOUD MESSAGING**" in fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to May 2022 under the supervision of **Dr. Vipul Kumar Sharma**(Assistant Professor) Computer Science and Engineering and Information Technology. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Utsarg Saxena, 181305

Utsarg Utsarg

Anurag Sharma, 181278

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Vipul Sharma 16/05/2022

Dr. Vipul Kumar Sharma
Assistant Professor
Computer Science and Engineering and Information Technology

Vipul Sharma

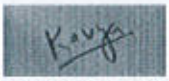
Assistant Registrar (Acad...
...of Information...
...(H.P.)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Data Warehousing"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology**,** Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Prof.(Dr.) Ravindara Bhatt,** Associate Professor, Department of Computer Science and Engineering.

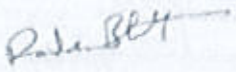
The matter embodied in the report has not been submitted for the award of any other degree or diploma.



Kavya Nagpal (181269)

Shreya Chaudhary (181279)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



(College Supervisor Signature)
Supervisor Name: Ravindara Bhatt
Designation: Associate Professor
Department name: Computer Science and Information Technology
Dated: 25th May, 2022

(Company Supervisor Signature)
Supervisor Name: Alok Choudhary
Designation: Manager
Department name: BT, ZS Associates
Dated: 25th May, 2022

CERTIFICATE

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled " Smart Monitoring Of Comedian Transcripts" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Jan 2022 to May 2022 under the supervision Of Mr. Surjeet Singh Assistant Prof. (Grade II) Department Of CSE & IT.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Rishabh Sharma (181280)

This is to certify that the above statement made by the candidates is true to the best of our knowledge.

30/05/22

Mr. Surjeet Singh

Assistant Prof. (Grade II)CSE & IT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

DECLARATION

I hereby declare that this project has been done by me under the supervision of **Dr. Hari Singh,** Assistant Professor (SG), Computer Science & Engineering and Information Technology, Jaypee University of Information Technology. I also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

Supervised by:

Dr. Hari Singh

Assistant Professor (SG)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat,

Submitted by:

Harshit Gautam

(181426)

Advait Agnihotri

(181282)

Computer Science & Engineering Department

Jaypee University of Information Technology

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled "COGNIZANT DIGITAL BUSINESS – DIGITAL EXPERIENCE JAVA FSE" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of Niveditha C.M. (Coach, Human Resource Department, Cognizant).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Poorvansh Gupta (181283)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mr. Arvind Kumar

Assistant Professor

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat, Himachal Pradesh

Ms. Niveditha C.M.

Coach

Human Resource Department

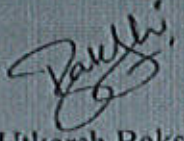
Cognizant Technology Solutions

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

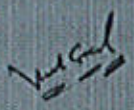
This is to certify that the project which is being represented in the project report named "Wind Direction Prediction of windmill data" in partial fufilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineeringand represented to the Department of Computer Science and Engineerin(CSE), Jaypee University of Information Technology, Waknaghatis an authentic record of work done by Utkarsh Bakshi (181284) during the period from January 2022 to May 2022 under the superviision of Renu Sri Gandham, Senior Lead Analyst | Data Scientist | Educator at Infosys Limited.



Utkarsh Bakshi 181284

The above statement made is correct to the best of my knowledge.

Renu Sri Gandham



Senior Lead Analyst | Data Scientist | Educator at Infosys Limited

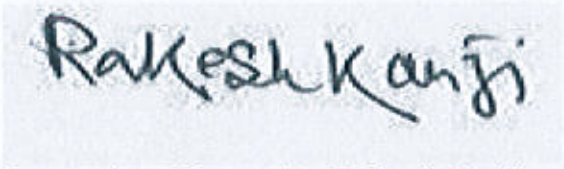
Scanned by TapScanner

CERTIFICATE

This is to ensure that the work set out in the project report entitled "Sentiment Analysis" presented to the Department of Computer Science and Engineering to fulfill part of the B-Tech award requirements for Computer Science and Engineering, is accurate. Jaypee University of Information Technology, Waknaghat accurate record of work done by Aanchal Thakur (181285), under the direction of Dr. Rakesh Kanji, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat, between January 2022 and May 2022.

Aanchal Thakur (181285)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



Supervisor Name: Dr. Rakesh Kanji
Designation: Assistant Professor (SG)
Department of Computer Science and Engineering and Information Technology
Jaypee University of Information Technology

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Spell Correction"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **(Dr. Rakesh Kanji)** (Assistant Professor(SG), Department of Computer Science and Information Technology).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Anubhav Thapa(181286)

&

Aashish Chauhan(181244)

Anubhav (181286) (181244)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Supervisor Name :Dr. Rakesh Kanji
Designation: Assistant Professor
Department name :Department of Computer Science and Information Technology
Dated:

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate by Supervisor

This is to certify that the work which is being presented in the project report titled **"Forest Fire Analysis and Prediction"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Purav Vashisht (181287) during the period from January 2022 to May 2022 under the supervision of Dr. Vivek Kumar Sehgal, (HOD) Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Purav Vashisht
(181287)

The above statement made is correct to the best of my knowledge.

Dr. Vivek Kumar Sehgal
Prof. HOD | CSE & IT
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

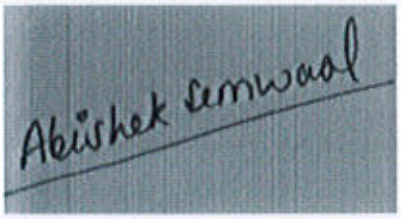
JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to ensure that the work set out in the project report entitled "User Managed End to End Encrypted One-to-One and Group Channel with Hybrid Encryption" presented to the Department of Computer Science and Engineering to fulfill part of the B-Tech award requirements for Computer Science and Engineering, is accurate. Jaypee University of Information Technology, Waknaghat accurate record of work done by Shreyansh Rawat (181348), Abishek Semwaal (181288), under the direction of Dr Himanshu Jindal, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat, between January 2022 and May 2022.

Shreyansh Rawat (181348)



Abishek Semwaal (181288)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Himanshu Jindal

Supervisor Name: Dr. Himanshu Jindal
Designation: Assistant Professor (SG)
Department of Computer Science and Engineering and Information Technology
Jaypee University of Information Technology

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled "PROGRAMMER ANALYST TRAINEE" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to August 2022 under the supervision of Akshat Jain. (Coach, Human Resource Department, Cognizant).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kartik Bohra (181289)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Rakesh Kanji

Assistant Professor

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat, Himachal Pradesh

Mr. Akshat Jain

Coach

Human Resource Department

Cognizant Technology Solutions

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

DECLARATION

We hereby declare that this project has been done by us under the supervision of **DR PARDEEP KUMAR KHOKHAR, PROFESSOR,** Jaypee University of Information Technology. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Pardeep Kumar. 16/05/2022

Supervised by:
(DR PARDEEP KUMAR KHOKHAR)
PROFESSOR
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

Submitted by:
(SUNNY MITTAL) (181230)
(KARTIK GUPTA) (181290)
Computer Science & Engineering Department
Jaypee University of Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"APPAREL RECOMMENDATION SYSTEM"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Wakhnaghat is an authentic record of work carried out by "Shubham Mehta (181301) Anirudh Singh Gangwar(181293)" during the period from August 2021 to December 2021 under the supervision of **Dr. Deepak Gupta**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Wakhnaghat.

Anirudh Singh Gangwar (181293)

Shubham Mehta (181301)

The above statement made is correct to the best of my knowledge.

Dr. Deepak Gupta
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Wakhnaghat, Himachal Pradesh, INDIA

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Solan (H.P.)

Certificate

This is to ensure that the work set out in the project report entitled "Next word Prediction" presented to the Department of computer science and engineering to fulfil part of the B-tech Award requirements for Computer Science and engineering id accurate.Jaypee University of Information technology,waknaghat accurate record of word of work done by Puru(181294) and Sukhpreet singh sura(181401), Under the direction of Dr. Pradeep Kumar Gupta,Department of Computer Science and Jaypee University of Information Technology,Waknaghat, between January 2022 and May 2022.

Puru(181294)

Sukhpreet singh sura(181401)

This is to certify that the above statement made by the candidate is correct to the best of my
Knowledge.

30/5/22

Dr. Pradeep Kumar Gupta
(Associate Professor)
Department of Computer Science and Engineering
Jaypee University Of Information technology

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Paxcom Internship Report"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to June 2022 under the supervision of **Mr. Surjeet Singh** (Assistant Professor), Computer Science Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Rohan Saini, 181332

Shagun, 181296

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Company Supervisor Signature)

Mr. Satbir Singh
Senior Software Engineer
Paxcom
Dated: 25-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Flight price prediction using machine learning "** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to May 2022 under the supervision of **Dr. Pradeep Kumar Gupta,** Associate Professor Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Yadunandan Sood (181297)

This is to certify that the above statement made by the candidate is true to the best of my knowledge

16/5/22

Dr. Pradeep Kumar Gupta

Associate Professor

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat,

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

This is to certify that the work presented in the project report titled "**HUMAN ACTIVITY RECOGNITION**" in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "**Hrishabh tripathi (181298)**" and "**Tanmay Kumar (181352)**" during the period from January 2022 to May 2022 under the supervision of **Dr. Pradeep Kumar Gupta**, Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat.

Hrishabh Tripathi
(181298)

Tanmay Kumar Tanmay
(181352)

To the best of my knowledge, the preceding statement is correct.

18/05/22

Dr. Pradeep Kumar Gupta
Professor (Associate)
Computer Science & Engineering And Information Technology
Jaypee University of Information Technology, Waknaghat, India
Dated:

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate of Completion of Internship

Infosys | Education, Training and Assessment

CERTIFICATE OF COMPLETION OF INTERNSHIP

This is to certify that

Kartik Ahluwalia

of

Jaypee University of Information Technology, Jaypee University of Information Technology

has completed the internship program at Infosys Limited

from

February 2022 – May 2022

Satheesha B N.

Satheesha B Nanjappa
Vice President and Head, Global Education Center

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " wheat detection using computer vision" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Pradeep Kumar Gupta,** Associate Professor Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Chirayushya M Singh (181300)

Shubham Chauhan (181316)

This is to certify that the above statement made by the candidate is true to the best of my knowledge

16/01/22

Dr. Pradeep Kumar Gupta
Associate Professor
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"APPAREL RECOMMENDATION SYSTEM"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Wakhnaghat is an authentic record of work carried out by "Shubham Mehta (181301) Anirudh Singh Gangwar(181293)" during the period from August 2021 to December 2021 under the supervision of **Dr. Deepak Gupta**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Wakhnaghat.

Anirudh Singh Gangwar (181293)

Shubham Mehta (181301)

The above statement made is correct to the best of my knowledge.

Dr. Deepak Gupta
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Wakhnaghat, Himachal Pradesh, INDIA

Assistant Registrar
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled "Potato Disease classification using CNN" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of Dr. Pradeep Kumar Gupta, Associate Professor Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ishan Thakur[181302]
Ishan Thakur

This is to certify that the above statement made by the candidate is true to the best of my knowledge

Shubham Goel
31.5.2022
Dr. Shubham Goel
Assistant Professor
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat.

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Acknowledgement

Firstly, I express my heartiest thanks and gratefulness to almighty God for His divine blessing makes it possible to complete the project work successfully.

I am really grateful and wish my profound indebtedness to the Supervisor **Dr. Pradeep Kumar Gupta, Associate Professor**, Department of CSE Jaypee University of Information Technology,Wakhnaghat. Deep Knowledge & keen interest of my supervisor in the field of **"Machine Learning" and "Internet of Things"** to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stages have made it possible to complete this project.

I would like to express my heartiest gratitude to **Dr. Pradeep Kumar Gupta,** Department of CSE, for his kind help to finish my project.

I would also generously welcome each one of those individuals who have helped me straightforwardly or in a roundabout way in making this project a win. In this unique situation, I might want to thank the various staff individuals, both educating and non-instructing, which have developed their convenient help and facilitated my undertaking.

Finally, I must acknowledge with due respect the constant support and patients of my parents.

Satvik Garg (181303)

Pradyumn Pundir (181329)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT •
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Towards an Internet-of-Things and Machine Learning-based Health Monitoring and Management System"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(Dr. Pradeep Kumar Gupta)** (Associate Professor).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Satvik Garg
(181303)
Pradyumn Pundir
(181329)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Pradeep Kumar Gupta
Associate Professor
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat
8/3/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Acknowledgement

Firstly, I express my heartiest thanks and gratefulness to Almighty God for His divine blessing makes it possible to complete the project work successfully.

I am really grateful and wish my profound indebtedness to Supervisor Dr. Amit Kumar, Assistant Professor (SG), Department of CSE Jaypee University of Information Technology, Wakhnaghat.

Deep Knowledge & keen interest of my supervisor in the field of "Data Science" to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, and reading many inferior drafts and correcting them at all stages have made it possible to complete this project.

I would like to express my heartiest gratitude to my supervisor, for his kind help to finish my project.

I would also generously welcome each one of those individuals who have helped me straightforwardly or in a roundabout way in making this project a win. In this unique situation, I might want to thank the various staff individuals, both educating and non-instructing, which have developed their convenient help and facilitated my undertaking.

Finally, I must acknowledge with due respect the constant support and patients of my parents.

Gauri Mittal (181304)

Assistant Registrar (Academics)
Jaypee University of Information Technology
Wakhnaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report titled " **BOOKBOXED – A BOOK-ORIENTED WEB APPLICATION USING FIREBASE CLOUD MESSAGING**" in fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to May 2022 under the supervision of **Dr. Vipul Kumar Sharma**(Assistant Professor) Computer Science and Engineering and Information Technology. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Utsarg Saxena, 181305

Anurag Sharma, 181278

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Vipul Kumar Sharma
Assistant Professor
Computer Science and Engineering and Information Technology

16/05/2022

CERTIFICATE

This is to guarantee that the work which is being introduced in the venture report named "Customer Segmentation Analysis" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is a genuine record of work carried out by Minakshi Sharma(181306) during the period from January 2022 to June 2022 under the supervision of Dr. Shubham Goel, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Minakshi

Minakshi Sharma

181306

The above assertion made is correct to the best of my knowledge.

Shubham Goel
16-5-2022

Dr. Shubham Goel

Assistant Professor (SG)

Department of Computer Science & Engineering

Jaypee University of Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled **"Predictions of Loan E-Signing Based on Financial Stats of Applicants Using Machine Learning"** is in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2021 to May 2021 under the supervision of **Dr. Himanshu Jindal** (Assistant Professor (SG), Dept. CSE & IT).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

For Apoorv Vats - Ishita Mishra

Apoorv Vats, 181308

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Himanshu Jindal
Assistant Professor (SG)
Department CSE & IT

Assistant Professor (SG)
Jaypee University of Information Technology
Waknaghat, Solan-173234, H.P.

CERTIFICATE

(Student Sign)

Mohit Malhotra, 181309

I hereby declare that the presented report entitled "Internship report at Paxcom India Pvt Ltd" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to May 2022 under the supervision of Mrs. Pallavi Vasishta. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mrs. Pallavi Vasishta
Development Manager
Paxcom India Pvt. Ltd

Vivek Sehgal
HOD
CSE Dept.

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "**Text and Image Steganography for Communication**" in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Harshit Kumar (181310), Abhishek SIngh (181355)" during the period from January 2022 to June 2022 under the supervision of Dr. Amit Kumar[Assistant Professor (Senior Grade)],
Dr. Pankaj Dhiman [Assistant Professor (Grade - II)] Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Harshit Kumar
(181310)

Abhishek Singh
(181355)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervised by:
Dr. Amit Kumar
Assistant Professor (Senior Grade)
Dr. Pankaj Dhiman
Assistant Professor (Grade - II)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

This is to certify that the work which is being presented in the project report titled "ATTENDANCE MANAGEMENT SYSTEM USING FACE RECOGNITION " in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science Engineering submitted to the Department of Computer science Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Ishan Verma (181312) and saurabh shukla (181343) during a period from July 2021 to May , 2022 under the supervision of Dr. Pankaj Dhiman Assistant professor), Department of Computer science Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Dr. Pankaj Dhiman

Assistant professor computer

Science Engineering

JUIT , Waknaghat

Prof.(Dr.) Vivek Sehgal

Professor & Head of Department

computer Science Engineering

JUIT , Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " Bank Note authentication using machine learning" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Shubham Goel**, Assistant Professor Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vishal

Vishal (181313)

This is to certify that the above statement made by the candidate is true to the best of my knowledge

Shubham Goel
17-5-2022

Dr. Shubham Goel

Assistant Professer

Computer Science & Engineering and Information Technology Jaypee University of Information Technology, Waknaghat,

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"CRYPTOCURRENCY PRICE PREDICTION USING DEEP LEARNING "** in partial fulfillment of the requirements for the award of the degree of B Tech in Computer Science and Engineering submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat ,Solan is an authentic record of work carried out by "Jyoti Sarpal (181314)", "Tanisha Ranta (181342)" during the period from January 2022 to May 2022 under the supervision of **Dr Monika Bharti**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat ,Solan.

Jyoti Sarpal (181314)

Tanisha Ranta (181342)

The above statement made is correct to the best of my knowledge.

18/05/22

(Dr Monika Bharti)
Assistant Professor
(CS/IT)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,Solan

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I hereby declare that the work presented in this report entitled **"PHISHING WEBSITE DETECTION"** in fulfilmentof the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Mr. PrateekThakral**, Assistant Professor, department of Computer Science & Engineering and Information Technology.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

AkritiSoni, 181315

PranchalAbrol, 181260

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mr. PrateekThakral
Assistant Professor
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " wheat detection using computer vision" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Pradeep Kumar Gupta,** Associate Professor Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Chirayushya M Singh (181300)

Shubham Chauhan (181316)

This is to certify that the above statement made by the candidate is true to the best of my knowledge

16/05/22

Dr. Pradeep Kumar Gupta
Associate Professor
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Certificate

This is to certify that the work which is being presented in the project report titled **"IPM Product Testing using Selenium"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Karan Sharma (181317)during the period from January 2022 to May 2022 under the supervision of Dr. Shubham Goel ,Department of Computer Science and Engineering, Jaypee University of Information Technology,Waknaghat.

Karan Sharma
(181317)

The above statement made is correct to the best of my knowledge.

Shubham Goel
31.5.2022
Dr. Shubham Goel
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Registrar (Academics)
Jaypee University of Information Technology

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Lung Colon Cancer Prediction using CNN"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(Dr. Monika Bharti)** (Assistant Professor and Computer Science).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Harsh Singhal,181318

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

17/05/22

Dr. Monika Bharti
Assistant Professor
Computer Science
12/05/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I hereby declare that the work presented in this report entitled " **SECURE ONLINE AUCTION SYSTEM** " in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **Dr. Jagpreet S. Sidhu,** Assistant Professor (SG), Department of Computer Science & Engineering and Information Technology.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Pranav Dabra, 181319

Ankur Rana, 181267

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

14/05/2016

Dr. Jagpreet S. Sidhu
Assistant Professor (SG)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology

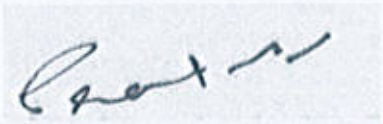
CERTIFICATE

I hereby declare that the work presented in this report entitled **Movie Booking System** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Prateek Thakral**, Assistant Professor (Grade-II), Department of Computer Science & Engineering and Information Technology and **Pankaj Gupta,** Lead Software Engineer II, Information Technology - Software, Infra.Market. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Anmol Srivastava

181320

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



Prateek Thakral

Assistant Professor (Grade-II)
Computer Science & Engineering
and Information Technology
Jaypee University of
Information Technology,
Waknaghat, Solan

Pankaj Gupta

Lead Software Engineer II
Information Technology - Software
Infra.Market

CERTIFICATE

This is to certify that Devansh Kaushik was working as an intern with Paxcom since 7th February 2022 on developing different product related feature and also integrating various tools. This letter was issued on request from the employee andthe company bears no responsibility or liability on behalf of the employee for any transaction that may arise.

Name of Supervisor: Sakshi Sehgal
Designation: Senior Data Scientist
Date: 27th May

DR. AMOL VASUDEVA

DEVANSH KAUSHIK
81322, CS-85

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Declaration

I hereby declare that the work presented in this report entitled **Project Management System** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr Amit Kumar**, Assistant Professor(SG), Department of Computer Science & Engineering and Information Technology, and **Raman Sharma,** Senior Associate Engineer ,Magic EdTech . The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Harshit Rai

(Student
Signature)
Harshit Rai
181324

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

DocuSigned by:
Raman Sharma
9CE69BEA3A3F478...

Raman Sharma
Senior Associate Engineer
Magic EdTech

5/30/2022

Dr Amit Kumar (SG)
Computer Science & Engineering
and Information Technology

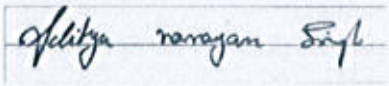
JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

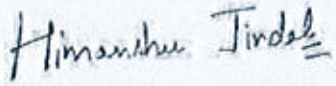
This is to ensure that the work set out in the project report entitled "Encrypted HealthCare We App" presented to the Department of Computer Science and Engineering to fulfill part of the B-Tech award requirements for Computer Science and Engineering, is accurate. Jaypee University of Information Technology, Waknaghat accurate record of work done by Mridul Pratap Singh (181347), Aditya Narayan Singh (181325), under the direction of Dr Himanshu Jindal, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat, between January 2022 and May 2022.

Mridul Pratap Singh (181347)



Aditya Narayan Singh (181325)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



Supervisor Name: Dr. Himanshu Jindal
Designation: Assistant Professor (SG)
Department of Computer Science and Engineering and Information Technology
Jaypee University of Information Technology

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Internship In Support Operations" in fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Dev Kumar (181326)" during the period from Feburary 2022 to May 2022 under the supervision of Dr. Monika Bharti, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat..

Dev.

Dev Kumar(181326)
The above statement made is correct to the best of my knowledge.

Dr. Monika Bharti
Assistant Professor
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled " **Salary -Prediction** " in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by"**Sanjay Kumar (181327)**" during the period from August 2021 to December 2021 under the supervision of Dr. Yugal Kumar Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Sanjay ,181327

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Yugal Kumar
Associate Professor
Department of Computer Science & Engineering and Information Technology Jaypee University of Information Technology

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"SCORECARD DEVELOPMENT"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Ravindara Bhatt** (Associate Professor, Department of CSE).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ishika, 181328

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Ravindara Bhatt
Associate Professor
Department of CSE
Dated: 26-05-2022

Aman Bhardwaj
Sr Analytic Consultant
GDCA
Dated:26-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Acknowledgement

Firstly, I express my heartiest thanks and gratefulness to almighty God for His divine blessing makes it possible to complete the project work successfully.

I am really grateful and wish my profound indebtedness to the Supervisor **Dr. Pradeep Kumar Gupta, Associate Professor**, Department of CSE Jaypee University of Information Technology, Wakhnaghat. Deep Knowledge & keen interest of my supervisor in the field of **"Machine Learning" and "Internet of Things"** to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stages have made it possible to complete this project.

I would like to express my heartiest gratitude to **Dr. Pradeep Kumar Gupta,** Department of CSE, for his kind help to finish my project.

I would also generously welcome each one of those individuals who have helped me straightforwardly or in a roundabout way in making this project a win. In this unique situation, I might want to thank the various staff individuals, both educating and non-instructing, which have developed their convenient help and facilitated my undertaking.

Finally, I must acknowledge with due respect the constant support and patients of my parents.

Satvik Garg (181303)

Pradyumn Pundir (181329)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT •
IQAC

Assistant Registrar
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

I

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**Towards an Internet-of-Things and Machine Learning-based Health Monitoring and Management System**" in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(Dr. Pradeep Kumar Gupta)** (Associate Professor).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Satvik Garg
(181303)

Pradyumn Pundir
(181329)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Pradeep Kumar Gupta
Associate Professor
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat
8/3/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

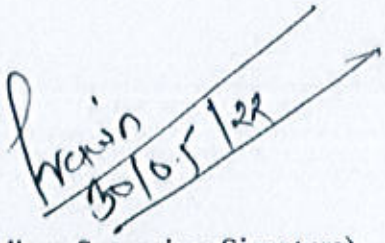
Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Hevo Customer Experience"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to May 30 under the supervision of **(Prof. Praveen Modi)** (Assistant Professor, Department of Computer Science and Engineering).

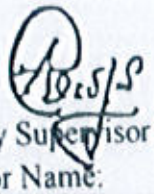
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)
DIWAKAR SRIVASTAVA
(181330)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



(College Supervisor Signature)
Supervisor Name:
Prof. Praveen Modi
Designation: **Asst. Professor**
Departmentname: **CSE**
Dated: **25/05/2022**



(Company Supervisor Signature)
Supervisor Name:
Mr. Arun Sunderraj
Designation: **Manager**
Department name: **CXE**
Dated: **25/05/2022**

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Sign Language Hand Gesture Recognition System** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering**, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Esha Pandey and Aryan Gupta during the period from August 2021 to May 2022 under the supervision of **Mr. Deepak Gupta**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Aryan Gupta (181331)

Esha Pandey(181336)

The above statement made is correct to the best of my knowledge.

21/05/22

Mr. Deepak Gupta

Asst. Prof. Senior Grade

Computer Science & Engineering

Jaypee University of Information Technology, Waknaghat.

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Paxcom Internship Report"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to June 2022 under the supervision of **Mr. Surjeet Singh** (Assistant Professor), Computer Science Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Rohan Saini, 181332

Shagun, 181296

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Company Supervisor Signature)

Mr. Satbir Singh
Senior Software Engineer
Paxcom
Dated: 25-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE OF ORIGINALITY

This is to certify that the work which is being presented in the project report titled Steganography of images in completion of the requirements for the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Pranav during the period from July 2021 to December 2021 underthe supervision of Mr. Deepak Gupta, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Pranav Verma
(181333)

The above statement made is correct to the best of my knowledge.

DR. PANKAJ DHIMAN
ASSISTANT PROFESSOR (GRADE-II)

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Rush App iOS Automation" in fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Harshit Kumar Gupta (181334)" during the period from Feburary 2022 to May 2022 under the supervision of Mr. Praveen Modi, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat..

Harshit Kumar Gupta (181334)
The above statement made is correct to the best of my knowledge.

Mr. Praveen Modi
Assistant Professor
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled **"Rxlogix,Noida "** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Pradyuman Sharma** during the said period; February 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Pradyuman Sharma and Rxlogix, Noida, Uttar Pradesh dated 7th February, 2022.

Pradyuman Sharma (181335)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Sign Language Hand Gesture Recognition System** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering**, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Esha Pandey and Aryan Gupta during the period from August 2021 to May 2022 under the supervision of **Mr. Deepak Gupta**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Aryan Gupta (181331)

Esha Pandey(181336)

The above statement made is correct to the best of my knowledge.

21/05/22

Mr. Deepak Gupta

Asst. Prof. Senior Grade

Computer Science & Engineering

Jaypee University of Information Technology, Waknaghat.

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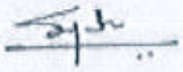
Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Solan (H.P.)

Certificate

I hereby declare that the work presented in this report entitled " **Open source learning platform**" is in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology**,** Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Rajini Mohana, associate Professor, CSE.**
The matter embodied in the report has not been submitted for the award of any other degree or diploma.



(Student Signature)
Suryansh Saraswat (181397)

(Student Signature)
Deepak Kumar (181337)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Dr. Rajini Mohana
Associate Professor
Computer Science and Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled " **Internship report.**" in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **Mr. Bobbin Sondhi.**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Aman Choubey

(181338)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mr. Bobbin Sondhi

Senior Software Engineer

May 27th 2022

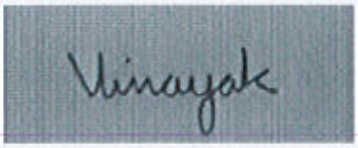
Assistant Regis
Jaypee Univ
Waknaghat, Distt. Solan (H.P.)

30/05/22

(Deepak Gupta)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled **Social Distancing Checker** in fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Mr. Prateek**, Assistant Professor (Grade-II), Department of Computer Science & Engineering and Information Technology. The matter embodied in the report has not been submitted for the award of any other degree or diploma.



Vinayak Katoch

181339

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

PRATEEK

Assistant Professor (Grade-II)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat, Solan

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **" Salary -Prediction "** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by**"Jigyasa (181340)"** during the period from August 2021 to December 2021 under the supervision of Dr. Yugal Kumar Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Jigyasa ,181340

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Yugal Kumar
Associate Professor
Department of Computer Science & Engineering and Information Technology Jaypee University of Information Technology

Assistant Registrar
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"CRYPTOCURRENCY PRICE PREDICTION USING DEEP LEARNING "** in partial fulfillment of the requirements for the award of the degree of B Tech in Computer Science and Engineering submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat ,Solan is an authentic record of work carried out by "Jyoti Sarpal (181314)", "Tanisha Ranta (181342)" during the period from January 2022 to May 2022 under the supervision of **Dr Monika Bharti**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat ,Solan.

Jyoti Sarpal (181314)

Tanisha Ranta (181342)

The above statement made is correct to the best of my knowledge.

18/05/22

(Dr Monika Bharti)
Assistant Professor
(CS/IT)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,Solan

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Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

This is to certify that the work which is being presented in the project report titled "ATTENDANCE MANAGEMENT SYSTEM USING FACE RECOGNITION " in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science Engineering submitted to the Department of Computer science Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Ishan Verma (181312) and saurabh shukla (181343) during a period from July 2021 to May , 2022 under the supervision of Dr. Pankaj Dhiman Assistant professor), Department of Computer science Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Dr. Pankaj Dhiman
Assistant professor computer
Science Engineering
JUIT , Waknaghat

Prof.(Dr.) Vivek Sehgal
Professor & Head of Department
computer Science Engineering
JUIT , Waknaghat

I

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"BRAIN TUMOR SEGMENTATION"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Aman Sharma**, Assistant professor.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Student Name: Chandan Dhiman

Roll No.: 181344

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)

Supervisor Name: Dr. Aman Sharma, Designation: Assistant Professor

Department Name: Computer Science and Engineering Dated:

IQAC

(I) CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Electronic Health Records using Blockchain"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **"Rohit Sharma (181345)"** during the period from January 2022 to July 2022 under the supervision of **Dr. Amit Kumar**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Rohit Sharma (181345)

The above statement made is correct to the best of my knowledge.

Dr. Amit Kumar
Assistant Professor (SG)
Computer Science & Engineering and Information
Technology Jaypee University of Information
Technology, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Predictive Diagnosis Analysis of Thyroid Disease using Machine Learning "** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, Solan is an authentic record of work carried out by Utkarsh Jaiswal (181346) during the period from January 2022 to May 2022 under the supervision of **Dr. Rakesh Kanji,** Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Utkarsh Jaiswal

[redacted]

Utkarsh Jaiswal (181346)

The above statement made is correct to the best of my knowledge.

Rakesh Kanji

Dr. Rakesh Kanji
Assistant Professor (SG)
Computer Science & Engineering and Information Technology

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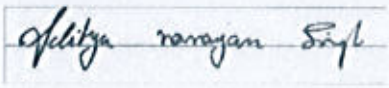
Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

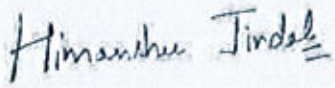
This is to ensure that the work set out in the project report entitled "Encrypted HealthCare We App" presented to the Department of Computer Science and Engineering to fulfill part of the B-Tech award requirements for Computer Science and Engineering, is accurate. Jaypee University of Information Technology, Waknaghat accurate record of work done by Mridul Pratap Singh (181347), Aditya Narayan Singh (181325), under the direction of Dr Himanshu Jindal, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat, between January 2022 and May 2022.

Mridul Pratap Singh (181347)



Aditya Narayan Singh (181325)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



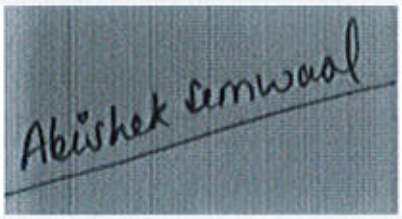
Supervisor Name: Dr. Himanshu Jindal
Designation: Assistant Professor (SG)
Department of Computer Science and Engineering and Information Technology
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to ensure that the work set out in the project report entitled "User Managed End to End Encrypted One-to-One and Group Channel with Hybrid Encryption" presented to the Department of Computer Science and Engineering to fulfill part of the B-Tech award requirements for Computer Science and Engineering, is accurate. Jaypee University of Information Technology, Waknaghat accurate record of work done by Shreyansh Rawat (181348), Abishek Semwaal (181288), under the direction of Dr Himanshu Jindal, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat, between January 2022 and May 2022.

Shreyansh Rawat (181348)



Abishek Semwaal (181288)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Himanshu Jindal

Supervisor Name: Dr. Himanshu Jindal
Designation: Assistant Professor (SG)
Department of Computer Science and Engineering and Information Technology
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "PROGRAMMER ANALYST TRAINEE IN ARTIFICIAL INTELLIGENCE APPLICATIONS" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science And Engineering and submitted to the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Pranika Agarwal (181349) during the period from February 2022 to May 2022 under the supervision of Dr. Monika Bharti, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Pranika

Pranika Agarwal, 181349

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Monika Bharti

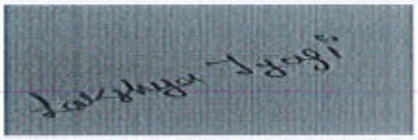
Supervisor Name: Dr. Monika Bharti
Designation: Associate Professor
Department name: Computer Science
Dated: 25 May 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"QEA WITH SELENIUM AND JAVA "** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **"Lakshya Tyagi(181350)** during the period from February 2022 to June 2022 under the supervision of **DR. AMOL VASUDEVA**, Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat.



Lakshya Tyagi
(181350)

The above statement made is correct to the best of my knowledge.

Dr. Amol Vasudeva
Professor
Computer Science & Engineering And Information Technology
Jaypee University of Information Technology, Waknaghat, India
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

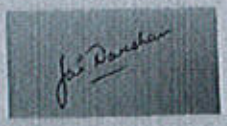
This is to certify that the work which is being presented in the project report titled **Heartbeat Anomaly Detection from Audio Files** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Pankil Pathania (181351)** during the period from January 2022 to May 2022 under the supervision of **Dr. Rajinder Sandhu** Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Student Name: Pankil Pathania

Roll number: 181351

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervisor Name: Dr. Rajinder Sandhu
Assistant Professor (SG)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology



Supervisor Name: Darshan Sai
DC Delivery Manager
26-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work presented in the project report titled "**HUMAN ACTIVITY RECOGNITION**" in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "**Hrishabh tripathi (181298)**" and "**Tanmay Kumar (181352)**" during the period from January 2022 to May 2022 under the supervision of **Dr. Pradeep Kumar Gupta**, Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat.

Hrishabh Tripathi
(181298)

Tanmay Kumar Tanmay
(181352)

To the best of my knowledge, the preceding statement is correct.

18/05/22

Dr. Pradeep Kumar Gupta
Professor (Associate)
Computer Science & Engineering And Information Technology
Jaypee University of Information Technology, Waknaghat, India
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Smart POS and Smart Self Checkout iOS Apps"** in the fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, Solan is an authentic record of work carried out by **Varun Singh (181353)** under the supervision of **Mr. Narendran Anil (Engineering Manager) and Mr. Pratyush Kumar (iOS Team Lead)**, Zopsmart Technologies, Bangalore, India.

VARUN SINGH 181353

The above statement made is correct to the best of my knowledge.

Mr. Narendran Anil
Engineering Manager,
ZopSmart Technologies, Bangalore

Pratyush Kumar

Mr.Pratyush Kumar
iOS Team Lead,
ZopSmart Technologies, Bangalore

Dr.Ruchi Verma
Assistant Professor (SG),
Dept. of CSE & IT,
JUIT, Solan

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

(I) CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"AI Image Captioning"** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science and Engineering and submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **"Parth Bali (181354)"** during the period from January 2021 to May 2021 under the supervision of **Dr. Amit Kumar**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Parth Bali (181354)

The above statement made is correct to the best of my knowledge.

Dr. Amit Kumar Assistant

Professor (SG)

Computer Science & Engineering and Information

Technology Jaypee University of Information Technology,

Waknaghat

AAYUSH MANTRY

Mr. Mantry Aayush

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "**Text and Image Steganography for Communication**" in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Harshit Kumar (181310), Abhishek SIngh (181355)" during the period from January 2022 to June 2022 under the supervision of Dr. Amit Kumar[Assistant Professor (Senior Grade)],
Dr. Pankaj Dhiman [Assistant Professor (Grade - II)] Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Harshit Kumar
(181310)

Abhishek Singh
(181355)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervised by:
Dr. Amit Kumar
Assistant Professor (Senior Grade)
Dr. Pankaj Dhiman
Assistant Professor (Grade - II)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

This is to certify that the work which is being presented in the Project report titled "**Cloud Computing Based Telemedicine Application** " in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science & Engineering** and submitted to the Department of Computer Science & Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Ishika Goel (181356) and Ameesha Varma (181358)" during the period from August 2021 to December 2021 under the supervision of Dr. Rajni Mohana, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Ishika Goel (181356)

Ameesha Varma (181358)

The above statement made is correct to the best of my knowledge.

(Dr Rajni Mohana)

Associate Professor

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Automated Fitness Tracker" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Rudresh Sharma (181372), Kunal Kansal (181357)" during the period from January 2022 to May 2022 under the supervision of "Dr. Rajinder Sandhu", Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Rudresh Sharma
(181372)

Kunal Kansal
(181357)

The above statement made is correct to the best of my knowledge.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

18/5/22

(Dr. Rajinder Sandhu)
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat, 173234

CERTIFICATE

This is to certify that the work which is being presented in the Project report titled "**Cloud Computing Based Telemedicine Application** " in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science & Engineering** and submitted to the Department of Computer Science & Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Ishika Goel (181356) and Ameesha Varma (181358)" during the period from August 2021 to December 2021 under the supervision of Dr. Rajni Mohana, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Ishika Goel (181356)

Ameesha Varma (181358)

The above statement made is correct to the best of my knowledge.

(Dr Rajni Mohana)

Associate Professor

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled "**Handwritten Digit Recognizer**" in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Wakhnaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Himanshu Jindal ,Assistant Professor(SG)**, Department of CSE Jaypee University of Information Technology, Wakhnaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vatsal Agrawal 181359

V Agrawal

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Himanshu Jindal

Assistant Registrar (Academics)

Candidate's Declaration

I hereby declare that the work presented in this report entitled internship training report in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **(Supervisor name)** (Designation and Department name). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)
Student Name- Ketan Mittal
Roll no.- 181361

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Ekta 31/05/2022.

Supervisor Name: Dr. Ekta Gandotra
Designation: Assistant Professor (SG)
Department name: CSE
Dated: 26-05-2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Supervisor Name: Grace Esther
Designation: Programmer
Department Name: Human Resource-Gen C
Dated: 26-05-2022

CERTIFICATE

This is to certify that the work which is being presented in the project report titled *"Semantic Data Analysis"* is in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by *"Tejaswee Tewari(181362)"* during the period from January 2022 to May 2022 under the supervision of *Dr. Ruchi Verma*, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Tejaswee Tewari (181362)

The above statement is correct to the best of my knowledge.

Dr. Ruchi Verma

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Development of Online Course Application with Ruby on Rails framework"** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **"Anurag Kanaujia (181363)"** during the period from February 2022 to May 2022 under the supervision of **Dr. Ravindara Bhatt**, Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat.

Anurag Kanaujia
(181363)

The above statement made is correct to the best of my knowledge.

Dr. Ravindara Bhatt
Professor
Computer Science & Engineering And Information Technology
Jaypee University of Information Technology, Waknaghat, India
Dated:

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan, H.P.

CERTIFICATE

I hereby declare that the work presented in this report entitled Key Dumping Keylogger in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of**Dr. Pankaj Dhiman**Assistant Professor(Grade-II) Computer Science & Engineering and Information Technology

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Yash Sharma (181366)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Pankaj Dhiman
Assistant Professor(Grade-II)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "ANALYSIS OF AMERICAN UNIVERSITIES " in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Anant Mishra (181367)" And "Utkarsh Pandit (181352)" during the period from August 2021 to December 2021 under the supervision of Prof. Prateek Thakral, Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat.

Anant Mishra
(181367)

Utkarsh Pandit
(181432)

The above statement made is correct to the best of my knowledge.

18/5/22

Professor Prateek Thakral

Computer Science & Engineering And Information Technology
Jaypee University of Information Technology, Waknaghat, India

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

I hereby declare that the presented report entitled "Internship report at Paxcom India Pvt Ltd" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2021 to May 2021 under the supervision of Mr. Vikas Kumar. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vaibhav Thakur.

Vaibhav Thakur
181368

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Vikas Kumar..

Mr. Vikas Kumar
Technical Lead
Paxcom India Pvt. Ltd.

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Fullstack Developer training Angular, ASP.NET , Entity Framework Core and MS-SQL" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Shivang Mishra** during the said period;1st April 2022 – 10th May 2022, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Shivang Mishra& Shivang Mishraand Infosys Ltd. dated 30.01.2022.

Shivang Mishra(181369)
Jaypee University of Information Technology
Waknaghat, Solan, H.P.

The above statement made is correct to the best of our knowledge.

30-05-22

(University Supervisor)
Dr. Kapil Sharma
Asst. Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

Company Supervisor
Rohini N
Senior Educator at Education, Training and Assessment,
Infosys Ltd.
(Digital signature unavailable, as per Confidentiality Policy)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this training report for company " **Hike** " in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to June 2022 under the supervision of Vishal Bajaj (SDM, Web. dev. Team Lead) .

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Arpit Mishra

Student Name: Arpit Gurudutt Mishra

Roll no.: 181370

Supervisor Name: Vishal Bajaj

Designation: SDM (Web. dev. Team Lead)

Department Name: Website development

Dated: 27th May 2022

Supervisor Name: Prof. Dr Vivek Kumar Sehgal

Designation: Professor and Head of Department of CSE

Department Name: Computer Science and Engineering

Dated: 27 May 2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "IPM PRODUCT TESTING WITH SELENIUM" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, Solan is an authentic record of work carried out by APOORAV CHAUDHARY (181371) during the period from January 2022 to May 2022 under the supervision of Dr. Rakesh Kanji, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of my knowledge.

Dr. Rakesh Kanji

Assistant Professor (SG)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat

APOORAV CHAUDHARY(181371)

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Automated Fitness Tracker" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Rudresh Sharma (181372), Kunal Kansal (181357)" during the period from January 2022 to May 2022 under the supervision of "Dr. Rajinder Sandhu", Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Rudresh Sharma
(181372)

Kunal Kansal
(181357)

The above statement made is correct to the best of my knowledge.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

18/5/22

(Dr. Rajinder Sandhu)
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat, 173234

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.) 173234

ACKNOWLEDGEMENT

Firstly, I express my heartiest thanks and gratefulness to almighty God for his divine blessing makes us possible to complete the project work successfully. I really grateful and wish my profound my indebtedness to Supervisor Dr. Rajinder Sandhu, Assistant Professor (SG), Department of CSE Jaypee University of Information Technology, Wakhnaghat. Deep Knowledge & keen interest of my supervisor in the field of "Image Forgery Detection" to carry out this project. Her endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

I would like to express my heartiest gratitude to Dr. Rajinder Sandhu, Department of CSE, for his kind help to finish my project. I would also generously welcome each one of those individuals who have helped me straight forwardly or in a roundabout way in making this project a win. In this unique situation, I might want to thank the various staff individuals, both educating and non-instructing, which have developed their convenient help and facilitated my undertaking.

Finally, I must acknowledge with due respect the constant support and patients of my parents.

Chinmay Chatterji

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled **"Software Engineer – Intern - Paxcom, Gurugram, Haryana"** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Shreya Dwivedi** during the said period; February 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Shreya Dwivedi and Paxcom Pvt Ltd. Gurugram, Haryana, dated 10th February, 2022.

(Student Signature)
Shreya Dwivedi, 181375.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

DR. HIMANSHU JINDAL
(ASST PROF CSE)
PROJECT SUPERVISOR

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P.
IQAC

CERTIFICATE

I hereby declare that the work presented in report entitled **"CUSTOMER INTERACTION MANAGEMENT USING AMAZON CONNECT IVR"** in partial fulfillment of the requirements for the award of the degree of B Tech in Computer Science and Engineering submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat ,Solan is an authentic record of work carried out by "Kushagra (181376)" during the period from February 2022 to June 2022 under the supervision of **Dr Monika Bharti**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat ,Solan.

Kushagra

(181376)

This is to certify that the above statement made is correct to the best of my knowledge.

30/05/22

(College Supervisor Signature)

Supervisor Name : **Dr. Monika Bharti**

Designation : Assistant Professor

Department name : **(CS/IT)**

Dated: 30/05/22

Nandigama Jyothsna

(Company Supervisor Signature)

Supervisor Name : Nandigama jyothsna

Designation : Technical Head

Department name :CIM DOMAIN

Dated 30/05/22

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the internship report in the fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, Solan is an authentic record of work carried out by **Prakhar Singh (181377)** under the supervision of **Mr. Abhishek Songra (Software Development Manager, Finance Technology) and Mr. Shubham Goyal (SDE II, Finance Technology, Project Mentor)**, Amazon.

PRAKHAR SINGH 181377

The above statement made is correct to the best of my knowledge.

Dr Ruchi Verma

Assistant Professor (Grade-1)
Dept of CSE & IT, JUIT Solan

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Medicinal Drug Recommendation System"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science & Engineering and submitted to the Department of Computer Science & Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Deepti Aggarwal (181378)** during the period from January 2022 to May 2022, under the supervision of **Dr. Ruchi Verma**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Deepti Aggarwal

Deepti Aggarwal
(181378)

The above statement made is correct to the best of my knowledge.

Dr. Ruchi Verma
Assistant Professor (Grade - I)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"SOCIAL MEDIA SENTIMENT ANALYSIS "** in partial fulfillment of the requirements for the award of the degree of BTech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **"Ayush Bari (181379)"** during the period from August 2021 to ~~December 2021~~ May 2022 under the supervision of **Dr. Hari Singh, Assistant Professor (SG), CSE & IT Department**, Jaypee University of Information Technology, Waknaghat.

Ayush

Ayush Bari
(181379)

The above statement made is correct to the best of my knowledge.

18/5/22

Dr. Hari Singh
Associate Professor (SG)
CSE & IT Department
Jaypee University of Information Technology, Waknaghat, India
Dated: ~~09/12/2021~~ 18/05/22

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT HP
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned by CamScanner

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Driver Drowsiness Detection System** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Kaustubh (181380)** during the period from July 2021 to May 2022 under the supervision of **Dr. Amit Kumar**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of my knowledge.

Dr. Amit Kumar

Assistant Professor (Grade-II)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology,

Waknaghat,

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " wheat detection using computer vision" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Shubham Goel,** Associate Professor, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vikrant Singh Jaryal (181382)

This is to certify that the above statement made by the candidate is true to the best of my knowledge

Shubham Goel
31.5.2022

Dr. Shubham Goel
Associate Professor
Department of Computer Science and Engineering
Jaypee University of Information Technology, Waknaghat
Dated-27-May-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

This is to certify that the work contained in this report entitled "A Low Latency Pipeline with Integrated Music Genre Classification" submitted by Aditya Shukla student of B.Tech (Semester VIII) Computer Science and Engineering JUIT, Waknaghat is a bona fide work performed by him under my supervision during the period February 2022 to May 2022 at Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Prof (Dr.) Vivek Sehgal
Professor and Head,
Department of Computer Science and Engineering,
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled " wheat detection using computer vision" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Ravindara Bhatt,** Associate Professor Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Raghav Minhas

Raghav Minhas(181384)

This is to certify that the above statement made by the candidate is true to the best of my knowledge

30.05.2022

Dr. Ravindara Bhatt

Associate Professor

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat,

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"SECURE MESSENGER ANDROID APPLICATION"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science & Engineering and Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(DR. SHUBHAM GOEL(PROFESSOR OF ,Computer Science & Engineering)**.The matter embodied in the report has not been submitted for the award of any degree or diploma.

(Student Signature)

VISHNU KUMAR
(181385)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Shubham Goel
17-5-2022

Supervisor Signature:
DR SHUBHAM GOEL
Department of Computer Science & Engineering
Jaypee University of Information Technology

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Cloud based Secure e-cart for Automatic billing using RFID and Zigbee"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Ishaan Kotwal (181386) during the period from January 2022 to May 2022 under the supervision of **Dr. Pradeep Kumar Gupta**, Department of Computer Science and Engineering, Jaypee University of Information Technology, W aknaghat .

16/05/22

Ishaan Kotwal 181386

The above statement made is correct to the best of my knowledge.

16/05/22

Dr. Pradeep Kumar Gupta , Associate professor
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

I hereby declare that the work presented in this report entitled **Movie Booking System** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr. Pankaj Dhiman**, Assistant Professor (Grade-II), Department of Computer Science & Engineering and Information Technology and **Pankaj Gupta**, Lead Software Engineer II, Information Technology - Software, Infra.Market. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ankit Sharma

181320

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Pankaj Dhiman

Assistant Professor (Grade-II)

Computer Science & Engineering and Information Technology
Jaypee University of Information Technology,
Waknaghat, Solan

Pankaj Gupta

Lead Software - II,

Infra.Market

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I hereby declare that the work presented in this report entitled "**MUSIC GENRE CLASSIFICATION USING MACHINE LEARNING**" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to May 2022 under the supervision of Dr. Rakesh Kanji Assistant Professor (SG) Department of Computer Science and Engineering, Jaypee University of Information Technology.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Mohak Goel
181388
Department of Computer Science and Engineering,
Jaypee University of Information Technology

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Rakesh Kanji
Assistant Professor (SG)
Department of Computer Science and Engineering,
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Paxcom Internship Report"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to June 2022 under the supervision of **Deepak Gupta** (Assistant Professor(S.G.), Computer Science Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Abhay Suri, 181389

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Deepak Gupta
Assistant Professor (S.G.)
Computer Science Engineering
Dated: 25-05-2022

Mr. Satbir Singh
Senior Software Engineer
Paxcom
Dated: 25-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

III

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "OBJECTIVE QUESTION GENERATOR APP" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Arshdeep Singh (181390)** during the period from February 2022 to May 2022 under the supervision of Dr. Himanshu Jindal, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Dr. Himanshu Jindal

Assistant Professor(SG)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Indoor Location and Navigation"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to July 2022 under the supervision of **Dr. Deepak Gupta**

(Assistant professor Senior grade Computer Science Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ojaswi Awasthi-181391

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

30/05/22

Dr. Deepak Gupta
Assistant Professor (SG)
Computer Science Engineering Dated:

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled " **Cognizant Internship Report**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **Dr. Sumedha Arora**

(Assistant professor Senior grade Computer Science Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vishrut Sharma, 181392

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Sumedha Arora
Assistant Professor(S.G.)
Computer Science Engineering
Dated: 25-05-2022

CERTIFICATE

I hereby declare that the work presented in this report entitled **Load Testing for RBS Maestro team pipelines** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 22 to June 2022 under the supervision of Hamsa Maravanthe Rama (Application Engineer)

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ankita Sood

Ankita Sood (181393)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Ekta.

Ekta 31/05/2022.

Ekta Gandotra
Assistant Professor(S.G)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

CERTIFICATE

This certificate is given to Rana Vijay Singh to successfully submit the internship report on the topic "Credit and Collection Dashboard" under the Department of Computer Science & Engineering and Information Technology for the academic year 2022 in the company Florence Capital.

Submitted by:

Rana Vijay Singh

181394

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology

30/05/22

Monika Bharti Jindal

Assistant Professor

Computer Science & Engineering and Information Technology

Department Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**Serverless application on AWS**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to July 2022 under the supervision of **Dr. Rajinder Sandhu**

(Assistant professor Senior grade Computer Science Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Aditya Sharma

Aditya Sharma-181395

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Rajinder

Dr. Rajinder Sandhu

Assistant Professor (SG)

Computer Science Engineering Dated: 01/12/2021

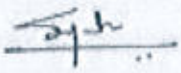
Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Certificate

I hereby declare that the work presented in this report entitled " **Open source learning platform**" is in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Rajini Mohana, associate Professor, CSE.**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.



(Student Signature)
Suryansh Saraswat (181397)

(Student Signature)
Deepak Kumar (181337)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Dr. Rajini Mohana
Associate Professor
Computer Science and Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Software solution for Augment Curation and Patient Explorer"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2022 to May 2022 under the supervision of **Dr Yugal Kumar, Associate Professor**.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kritika

(Student Signature) -
Name : Kritika Lodha
Rollno : 181398

This is to certify that the above statement made by the candidate is true to the best of my knowledge

29/8/2022

(Supervisor Signature)
Supervisor Name Dr Yugal Kumar
Designation Associate Professor
Department name CSE
Dated 30-8-2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Stock Forecasting Using Machine Learning Models"** in partial fulfillment of the requirements for the award of the degree of B.Tech in CSE and submitted to the Department of CSE, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Charvi Sharda(181399) during the period from January 2022 to May 2022 under the supervision of Dr. Amol Vasudeva , Assistant Professor (SG), Department of CSE, Jaypee University of Information Technology, Waknaghat.

Charvi Sharda (181399

The above statement made is correct to the best of our knowledge.

Dr. Amol Vasudeva

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Assistant Professor(S.G)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I hereby declare that the work presented in this report entitled **"Depression Tweet Analysis"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of Dr. Pankaj Dhiman, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Akshay Kumar (181400)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Pankaj Dhiman
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

Certificate

This is to ensure that the work set out in the project report entitled "Next word Prediction" presented to the Department of computer science and engineering to fulfil part of the B-tech Award requirements for Computer Science and engineering id accurate.Jaypee University of Information technology,waknaghat accurate record of word of work done by Puru(181294) and Sukhpreet singh sura(181401), Under the direction of Dr. Pradeep Kumar Gupta,Department of Computer Science and Jaypee University of Information Technology,Waknaghat, between January 2022 and May 2022.

Puru(181294)

Sukhpreet singh sura(181401)

This is to certify that the above statement made by the candidate is correct to the best of my
Knowledge.

30/5/22

Dr. Pradeep Kumar Gupta
(Associate Professor)
Department of Computer Science and Engineering
Jaypee University Of Information technology

Assistant Registrar (Academics)

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**Customer Segmentation**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology, Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Ravindara Bhatt** (Assistant Professor), Department of Computer Science and Information Technology).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Perla Venkata Naga Sai Ganesh (181402)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

28.05.2022

(Supervisor Signature)

Supervisor Name: Dr. Ravindara Bhatt Designation: Assistant Professor

Department Name: Department of Computer Science and Information Technology

Date

Assistant Registrar (Academics)

CERTIFICATE

I hereby declare that the work presented in this report entitled **"Account Prioritization and Segmentation"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to May 2022 under the supervision of **Mr. Aayush Joshi,** Business Operations Manager, ZS Associates London.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Astitva Shrestha, 181404

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Rakesh Kanji

Dr. Rakesh Kanji
Assistant Professor (SG)
Computer Science & Engineering
Dated: 26th May 2022

Aayush Joshi
Mr. Aayush Joshi
Business Operations Manager
ZS Associates, London
Dated: 26th May 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

I hereby declare that the work presented in this report entitled **"Deepfake Video Detection"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(Dr. Rakesh Kanji)** (Assistant Professor, Department of Computer Science & Engineering and Information Technology).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Navdeep Singh Hada, 181405.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Rakesh Kanji

Dr. Rakesh Kanji
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
Dated: 30th May 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

I hereby declare that the work presented in this report entitled "**Burst Image Deblurring using CNN**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **(Dr. Amit Kr. Jakhar)** (Designation and Department name).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)

Student Name: Anirudh Singh Pal

Rollno.: 181406

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Supervisor Name : Dr. Amit Kumar
Designation : Assistant Professor (SG)
Department name : Computer Science & Engineering
Dated:3rd december ,2021

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P. IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

I hereby declare that the work presented in this report entitled "Burst Image Deblurring using CNN" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer

Science & Engineering and Infonnation Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of (Dr. **Amit Kr. Jakbar)** (Designation and Department name).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

ij

~{'lv
(Student Signature)

Student Name: Anirudh Singh Pal

Rollno.: 181406

This is to certify that the above statement made by the candidate is true to the best of my **knowledge.**

(Supervisor Signature)
Supervisor Name : Dr. Amit Kumar
Designation : Assistant Professor (SG) . .
Department name : Computer Science & Engmeenng
Dated:3rd december ,202 l

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled "VOVOCA" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from December 2021 to March 2022 under the supervision of **Dr. Vipul Kumar Sharma** of Computer Science And Technology.

The matter embodied in the report has not been submitted for the award of any other degree or diploma

Anshul Trivedi (181410)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

V. Pul Sharma
18/05/2022

Supervisor Name: Dr. Vipul Kumar Sharma

Designation: Assistant Professor (Grade-II)

Department Name: Computer Science and Engineering

Dated: 12th May 2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
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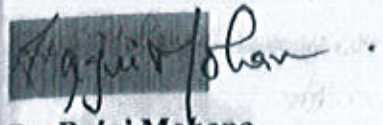
Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate By Supervisor

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



Dr. Rajni Mohana

Associate Professor

Computer Science and Information Technology

Dated: 09/05/2022

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Internship Report"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology, Waknaghat is an authentic record of my own work carried out over a period from 7 February 2022 to 31 May 2022 under the supervision of **Dr. Vipul Kumar Sharma, Computer Science Department.**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Arpit

Arpit Garg,
181412

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Vipul Sharma 31/05/22

Dr. Vipul Kumar Sharma
Assistant Professor (Grade-II)
Computer Science
Dated:

V. Dixit

Mr. Vinay Dixit
Sr. Manager
Technology
Dated: 29-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "DBMS-SQL-Python" in fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Vidit Jindal (181413)" during the period from January 2021 to May 2021 under the supervision of Prof. Praveen Modi, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat

Vidit Jindal
181413

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

(Supervisor Signature)
Mr. Praveen Modi
Assistant Professor
Computer Science and Engineering & Information Technology
Next
Dated: 28-05-2022

Esther Grace
Esther Grace
Programmer
Human Resource GenC

28-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Identity Governance Access(Saviynt)" in fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Kajal Singal(181414)" during the period from January 2022 to May 2022 under the supervision of Prof. Praveen Modi, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Kajal Singal (181414)

The above statement made is correct to the best of my knowledge.

Prof. Yugal Kumar
Associate Professor
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

Certificate

I hereby declare that the work presented in this report is entitled as "Healthcare Platform for Online Consultation" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/ Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of our own work carried out over a period from January 2022 to May 2022 under the supervision of Dr. Aman Sharma, Assistant Professor(SG), Computer Science. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

[redacted]

Ananya Srivastav, 181417

This is to certify that the above statement made by the candidate is true to the best of my knowledge

[redacted]

Dr. Aman Sharma

Assistant Professor (SG)

Computer Science

Dated:

[redacted]

Shanky Jain

Senior Product Specialist

HashedIn by Deloitte

Dated: 24/05/22

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled "Website Builder Software Intern, Paperplane " in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Shashwat Kapoor** during the said period, February 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Shashwat Kapoor and Paperlane Pvt Ltd.,Bangalore, , dated 10 February, 2022.

Shashwat Kapoor

181418

Jaypee University of Information Technology Waknaghat, Solan, H.P. The above statement made is correct to the best of our knowledge.

Mr. Varun Goyal(CTO)

Mr. Devansh Swarup(CEO)

Paperplane Pvt Ltd. Bangalore, Punjab

31/05/2022

Dr.Vipul Sharma (Assistant Professor)

Jaypee University of Information Technology Waknaghat, Solan, H.P

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"PathFinding Visualizer"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat ,is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Himanshu Jindal**(Assistant Professor(SG) , Computer Science and Engineering and Information Technology).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Meenakshi Sharma

Meenakshi Sharma,181419

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Himanshu Jindal

Dr. Himanshu Jindal
Assistant Professor (SG)
Computer Science and Engineering and Information Technology
Dated: 14 May,2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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PLAGIARISM VERIFICATION REPORT

Date: 31/05/2022

Type of Document (Tick): PhD Thesis | M.Tech Dissertation/ Report | B.Tech Project Report ✓ | Paper

Name: Chakori Chaturvedi Department: CSE Enrolment No 181420

Contact No. 8527917303 E-mail. chaturvedichakori@gmail.com

Name of the Supervisor: Dr Monika Bhatti

Title of the Thesis/Dissertation/Project Report/Paper (In Capital letters): Grammar Correction Using Rule Based System.

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(Signature of Student)

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31/05/22

(Signature of Guide/Supervisor)

Signature of HOD

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IQAC

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Name & Signature

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Librarian

Please send your complete thesis/report in (PDF) with Title Page, Abstract and Chapters in (Word File) through the supervisor at plagcheck.juit@gmail.com

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Custom Object Detection using YOLO v5** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology**, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Sahil Sharma during the period from Janaury 2022 to May 2022 under the supervision of **Dr. Ekta Gandotra**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Sahil

Sahil Sharma(181421)

The above statement made is correct to the best of my knowledge.

Ekta 16/05/2022.

Dr. Ekta Gandotra

Asst. Prof. Senior Grade

Computer Science & Engineering
Jaypee University of Information Technology, Waknaghat.

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"HEART DISEASE PREDICTOR"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(DR. Yugal Kumar) (Assistant Professor (Senior Grade),Computer Science & Engineering).**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Abhishek
(Student Signature)

ABHISHEK,181422

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

18/05/2022

Supervisor Signature:

DR. YUGAL KUMAR

Assistant Professor (Senior Grade)

Department of Computer Science & Engineering

Jaypee University of Information Technology

Dated:

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE DECLARATION

I hereby declare that the work presented in this report entitled "E-Pharmacy" in partial fulfillment of the requirements for the awardof the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from December 2021 to March 2022 under the supervision of Dr. Rajinder Sandhu of Computer Science And Technology.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Prabhat Rana (181423)

Kamal Singh (181264)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervisor Name: Prof. Dr. Rajinder Sandhu

Designation: Professor

Department name: Computer Science and Engineering

Dated: 2-03-2022

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Acknowledged by gargnaina19@gmail.com (Naina Garg on 1/25/2022 5:51:01 PM)

amazon | Development Centre India

INTERNSHIP LETTER

Naina Garg
House no. 507, Gagan Vihar
Shamli – 247776
UP
IN

Dear Naina,

On behalf of **Amazon Development Centre (India) Private Limited**, a company incorporated under the laws of India, having its registered office at # 26/1, Brigade Gateway, World Trade Centre, 10th Floor, Dr. Rajkumar Road, Malleshwaram (W) Bangalore - 560 055. Karnataka India (hereinafter the "Company" or "Amazon India"), we are very pleased to issue this Internship Letter for the position of an **Intern** at **Bangalore**, India.

Your internship with the Company will be subject to your acceptance of this Internship Letter and the terms and conditions set forth hereinbelow on or before 10 business days in the manner provided for by the Company.

Upon your acceptance of this Internship Letter, the same shall form a valid and binding agreement between Amazon India and you, and you shall be bound by the terms and conditions stipulated herein below.

1. Date of Commencement

Your internship with Amazon India will commence on **07-Feb-2022** and shall end as per the provisions contained in Section 12 herein below. The said duration of internship shall hereinafter be referred to as the "Term".

2. Duties

2.1 You will be engaged in the position of **Software Dev Engineer Intern**. Your manager will advise you about your duties and responsibilities after your joining with us. You will be expected to perform your duties to the best of your ability at all times as per the

Assistant (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

REGISTERED OFFICE : # 26/1, Brigade Gateway, World Trade Centre, 10th Floor, Dr. Rajkumar Road, Malleshwaram (W) Bangalore - 560 055. Karnataka India

Tel. : + 91 - 80 - 6787 3000, Fax : +91 - 80 - 3007 1031 / 33 CIN : U72200KA2004FTC034233

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Machine Learning Model Deployment in Cloud"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Rajni Mohana**, Associate Professor Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Shivek Gupta (181323)

Vardhan Chambial (181425)

This is to certify that the above statement made by the candidate is true to the best of my knowledge

16/5/22

Dr. Rajni Mohana
Associate Professor
Computer Science Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

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Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

DECLARATION

I hereby declare that this project has been done by me under the supervision of **Dr. Hari Singh,** Assistant Professor (SG), Computer Science & Engineering and Information Technology, Jaypee University of Information Technology. I also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

Supervised by:

Dr. Hari Singh

Assistant Professor (SG)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat,

Submitted by:

Harshit Gautam

(181426)

Advait Agnihotri

(181282)

Computer Science & Engineering Department

Jaypee University of Information Technology

I

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "**INDIA RAINFALL ANALYSIS PREDICTION**" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Tamanna (181427), Dikshant(181453)" during the period from January 2022 to May 2022 under the supervision of **Dr. Amol Vasudeva**, Assistant Professor (Senior Grade), Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Tamanna
(181427)
Tamanna

Dikshant
(181453)
Dikshant

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervised by:

Dr. Amol Vasudeva
Assistant Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology Jaypee University of Information Technology
Dated:

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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Certificate

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Rajni Mohana

Dr. Rajni Mohana
Associate Professor
(Computer science &
Engineering and IT)

Dated: 28/05/2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

I hereby declare that the work presented in this report entitled **"DP experience attribution analysis"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to May 2022 under the supervision of **Dr. Amol Vasudeva** Assistant Professor (SG) Department of Computer Science And Engineering.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Rajat, 181429

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr Amol Vasudeva
Assistant Professor (SG)
Department of Computer Science And Engineering.

DATED : 30 May, 2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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DECLARATION

We hereby declare that; this project has been done by our group under the supervision of Dr.Kapil Sharma, Jaypee University of Information Technology. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

26-05-22

Supervised by:
Dr.Kapil Sharma
Assistant Professor (SG)
(Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology)

Submitted by:
Nikhil Naresh (181430)
Miguel Kundal (181204)
(Computer Science & Engineering Department
Jaypee University of Information Technology)

Assistant Registrar (Academics)
Jaypee University of Information Technology
Solan (H.P.)

Scanned with CamScanner

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "ANALYSIS OF AMERICAN UNIVERSITIES " in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Anant Mishra (181367)" And "Utkarsh Pandit (181352)" during the period from August 2021 to December 2021 under the supervision of Prof. Prateek Thakral, Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat.

Anant Mishra
(181367)

Utkarsh Pandit
(181432)

The above statement made is correct to the best of my knowledge.

18/5/22

Professor Prateek Thakral

Computer Science & Engineering And Information Technology
Jaypee University of Information Technology, Waknaghat, India

IQAC

Registrar (Academics)
Information Technology

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"CROP AND FERTILIZER RECOMMENDATION SYSTEM "** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Prof. Dr. Vivek Kumar Sehgal**, Professor & Head Department of Computer Science & Engineering and Information Technology.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Mayank Tomar (181433) Mayank Tomar

Preetam Kumar Tripathy (181442) Preetam Kumar Tripathy

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Prof. Dr. Vivek Kumar Sehgal
Professor & Head
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology
Dated:11-05-2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled **"Software Engineer – Intern – Paxcom Pvt Ltd. Mohali, Punjab"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Shubham Sharma** during the said period; February 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Shubham Sharma and Paxcom Pvt Ltd. Mohali, Punjab, dated 10 February, 2022.

Shubham Sharma
181434
Jaypee University of Information Technology
Waknaghat, Solan, H.P.

The above statement made is correct to the best of our knowledge.

30-05-22

Dr. Kapil Sharma
Assistant Professor
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

IQAC

Assistant Registrar (Academic)
Jaypee University of Information Technology

Scanned with CamScanner

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled **"CIS – Security - ITM Associate Intern, Cognizant, Gurugram, Haryana"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Ritwik Tripathi** during the said period; March 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Ritwik Tripathi and Cognizant Technology Solutions dated 30.01.2022 under the supervision of **Dr. Kapil Sharma,** Assistant Professor (S.G.), Jaypee University of Information Technology, Waknaghat, Solan, H.P

Ritwik Tripathi
181436
Jaypee University of Information Technology
Waknaghat, Solan, H.P.

The above statement made is correct to the best of our knowledge.

30-05-22

Dr. Kapil Sharma
Assistant Professor (S.G.)
Jaypee University of Information Technology
Waknaghat, Solan, H.P.

CERTIFICATE

I hereby declare that the work presented in this report entitled "System Engineer Internship Report" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic of my work carried out over a period from February 2022 to June 2022 under the supervision of Dr Pankaj Dhiman Assistant Professor (Grade–II) of Computer Science Department.

The matter embodied in the report has not been submitted for the award of any degree or diploma.

Rishabh Sharma, 181437

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr Pankaj Dhiman
Assistant Professor (Grade–II)
Computer Science & Engineering and Information Technology
Dated: 30 May 2022

CERTIFICATE

I hereby declare that the work presented in this report entitled "Office Management and HR Portal" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic of my work carried out over a period from February 2022 to June 2022 under the supervision of Dr Pankaj Dhiman Assistant Professor (Grade-II) of Computer Science Department.

The matter embodied in the report has not been submitted for the award of any degree or diploma.

Siraj

Siraj Sharma, 181438

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Pankaj

Dr Pankaj Dhiman
Assistant Professor (Grade-II)
Computer Science & Engineering and Information Technology
Dated: 30 May 2022

Assistant Registrar (Examination)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

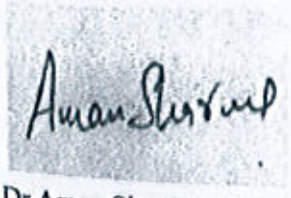
I hereby declare that the work presented in this report entitled " **Red wine quality prediction**" in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to May 2022 under the supervision of **Dr Aman Sharma**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

[redacted]

Parth Sharma

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



Dr Aman Sharma

Assistant Professor (SG)

Computer Science

Dated: 13/05/2022

Registrar (Academics)
of Information Technology

CERTIFICATE

I hereby declare that the work presented in this report entitled **"Password Manager"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from March 2022 to July 2022 under the supervision of Dr. Monika Bharti, Assistant Professor, CSE & IT.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Shradha Agarwal(181440)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

23/06/2022

Dr. Monika Bharti
Assistant Professor(SG)
Computer Science & Engineering and Information Technology Department
Jaypee University of Information Technology

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"CROP AND FERTILIZER RECOMMENDATION SYSTEM "** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Prof. Dr. Vivek Kumar Sehgal**, Professor & Head Department of Computer Science & Engineering and Information Technology.
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Mayank Tomar (181433) Mayank Tomar

Preetam Kumar Tripathy (181442) Preetam Kumar Tripathy.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Prof. Dr. Vivek Kumar Sehgal
Professor & Head
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology
Dated:11-05-2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

II

CERTIFICATE

This is to certify that the work which is being presented in the project report titled " Face Mask Detection" in the partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Varun Rangra (181451)" during the period from January 2022 to May 2022 under the supervision of Dr. Hari Singh in the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Varun Rangra (181451)

The above statement made is correct to the best of my knowledge.

18/5/22

Dr. Hari Singh
Assistant Professor(SG),
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat,

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "**INDIA RAINFALL ANALYSIS PREDICTION**" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Tamanna (181427), Dikshant(181453)" during the period from January 2022 to May 2022 under the supervision of **Dr. Amol Vasudeva**, Assistant Professor (Senior Grade), Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Tamanna
(181427)
Tamanna

Dikshant
(181453)
Dikshant

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervised by:

Dr. Amol Vasudeva
Assistant Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology Jaypee University of Information Technology
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

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CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Data hiding using Image Steganography" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by "Ankush Kashyap (181202), Parul Damalu (181454)" during the period from January 2022 to May 2022 under the supervision of **Dr. Kapil Sharma**, Assistant Professor (Senior Grade), Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Ankush Kashyap
(181202)

Parul Damalu
(181454)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervised by:

17-05-22

Dr. Kapil Sharma
Assistant Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology
Jaypee University of Information Technology
Dated:

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Sentiment Analysis"** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Shriya Singh (181455) during the period from January 2022 to May 2022 under the supervision of **Dr.Pradeep Kumar Gupta**, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Shriya Singh

(181455)

The above statement made is correct to the best of my knowledge.

Dr.Pradeep Kumar Gupta

Associate Professor

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Heartbeat Anomaly Detection from Audio Files** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Vasbi Sharma (181456)**during the period from January 2021 to May 2021 under the supervision of **Dr. Rajinder Sandhu** Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Vasbi Sharma

(181456)

The above statement made is correct to the best of my knowledge.

19/5/22

Dr. Rajinder Sandhu

Assistant Professor (SG)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology, Waknaghat,

Candidate's Declaration

I hereby declare that the work presented in this report entitled Image Segmentation and its Applications in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of Mr. Praveen Modi Assistant Professor (Grade-1). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vinay

Vinay Kumar (181458)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Praveen

Mr. Praveen Modi
Assistant Professor (Grade-1)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology

Dated: 26/05/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P.
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled **"Incentive Compensation"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Electronics and Communication Engineering** submitted in the department of **Computer Science Engineering and Information Technology,** Jaypee University of Information Technology, Waknaghat is an authentic record of my own work carried out over a period from February 2022 to May 2022 under the supervision of **Mr. Harsh Gupta (Business Operations Consultant, Gurgaon)** .

Ishita

Submitted by:
Ishita Kapoor
181459
Computer Science & Engineering Department
Jaypee University of Information Technology

Date- 30.05.2022

Dr. Vivek Seghal
Professor and Head
Computer Science & Engineering Department
Jaypee University of Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Fullstack Developer training Angular, ASP.NET , Entity Framework Core and MS-SQL" in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Akhil Sharma** during the said period;1st April 2022 – 10th May 2022, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Akhil Sharma& Akhil Sharma and Infosys Ltd. dated 30.01.2022.

Akhil Sharma(181460)

Akhil Sharma (181460)
Jaypee University of Information Technology
Waknaghat, Solan, H.P.

The above statement made is correct to the best of our knowledge.

30/05/2022

(University Supervisor)
Dr. Surjeet Singh
Asst. Professor (SG)
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

Company Supervisor
Rohini N
Senior Educator at Education, Training and Assessment,
Infosys Ltd.
(Digital signature unavailable, as per Confidentiality Policy)

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Environmental Data in Arduino Iot Cloud"** in partial fulfilmentof the requirements for the award of the degree of B.Tech in Information Technology and submitted to the Department of Computer Science Engineering and Information Technology, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Arushi (181461) and Harshita Sharma (181484)** during theperiod from January 2022 to May 2022 under the supervision of **Dr. Rajinder Sandhu,** Department of Computer Science Engineering and Information Technology, Jaypee University of Information Technology,Waknaghat.

Arushi (181461) Arushi

Harshita Sharma (181484) Harshita

The above statement made is correct to the best of my knowledge.

Rajinder 18/5/22

Dr. Rajinder Sandhu Assistant Professor (SG)

Computer Science Engineering and Information Technology,Jaypee University of Information Technology, Waknaghat.

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "**Ecommerce Web API Testing and Automation** " in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Jaspreet Singh(181477),Avirukh Dahiya(181462)** during the period from January 2022 to May 2022 under the supervision of Dr. Amit Kumar, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Dr. Amit Kumar
Assistant Professor(SG)
Computer Science & Engineering and Information Technology Jaypee University of Information Technology, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT H.P.
IQAC

Assistant Registrar (Acad)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Identity and Access Management** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering & Information Technology**, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Angima Anthwal during the period from January 2022 to May 2022 under the supervision of **Dr. Ruchi Verma**, Department of Computer Science and Engineering & Information Technology, Jaypee University of Information Technology, Waknaghat.

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Angima Anthwal (181464)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT IQAC

The above statement made is correct to the best of my knowledge.

29/5/22

Supervisor Name: Dr. Ruchi Verma

Designation: Assistant Professor (Grade-II)

Department Name: Computer Science and Engineering

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Plant Disease Detection** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering & Information Technology**, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Sanya Kanwar and Stuti Gupta during the period from Janaury 2022 to May 2022 under the supervision of **Dr. Ruchi Verma**, Department of Computer Science and Engineering & Information Technology, Jaypee University of Information Technology, Waknaghat.

Sanya Kanwar(181465)

Stuti Gupta(181467)

The above statement made is correct to the best of my knowledge.

Supervisor Name: Dr. Ruchi Verma

Designation: Assistant Professor (Grade-II)

Department Name: Computer Science and Engineering

CERTIFICATE

I hereby declare that the work presented in this report entitled "**Crop and Fertilizer Recommendation System Deployed On Cloud**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2021 to December 2021 under the supervision of **Dr. Rajinder Sandhu, Assistant Professor (SG), Department of Computer Science & Engineering and Information Technology.**

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Arpit Mehta

Arpit Mehta

181466

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Rajinder Sandhu

Dr. Rajinder Sandhu

Assistant Professor (SG)

Department of Computer Science & Engineering and Information Technology.

Dated: 31/5/22

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Plant Disease Detection** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering & Information Technology**, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Sanya Kanwar and Stuti Gupta during the period from Janaury 2022 to May 2022 under the supervision of **Dr. Ruchi Verma**, Department of Computer Science and Engineering & Information Technology, Jaypee University of Information Technology, Waknaghat.

Sanya Kanwar(181465)

Stuti Gupta(181467)

The above statement made is correct to the best of my knowledge.

Supervisor Name: Dr. Ruchi Verma

Designation: Assistant Professor (Grade-II)

Department Name: Computer Science and Engineering

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Modelling and Analysis of BPMN and DMN"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering submitted to the Department of Computer Science & Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Tanvi Tiwari (181468)** during the period from February 2022 to May 2022, under the supervision of **Dr. Ruchi Verma**, Assistant Professor (Grade - I), Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat. The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Tanvi

Tanvi Tiwari
(181468)

The above statement made is correct to the best of my knowledge.

Dr. Ruchi Verma
Assistant Professor (Grade - I)
Department of Computer Science & Engineering
and Information Technology
Jaypee University of Information Technology

Monika Saxena
Technical Architect
Department: Web Development
Paymentus

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Jaypee University of Information Technology Waknaghat, Solan-173234, Himachal Pradesh

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled "Hand-Write Virtual board." in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of (DR. PARDEEP KUMAR)(Associate Professor in the Department of Computer Science & Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

[redacted]

(Student Signature)
ARSHIT YADAV, 181469

Prateek

PRATEEK SHARMA, 181482

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Pardeep Kumar 30/05/2022

(Supervisor Signature)
Supervisor Name: Dr. Pardeep Kumar
Designation: Associate Professor
Department name: Computer Science & Engineering

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Candidate's Declaration

I hereby declare that the work presented in this report entitled " **Internship/Project Report**" is in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my work carried out over a period from Febraury 2022 to May 2022 during my internship at the company '**ICERTIS SOLUTIONS**' . During this time I had been in constant touch with my supervisor **Mr. Prateek Thakral** (Assistant Professor) in Department of Computer Science & Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

( )

Jatin Garg

26/5/2022

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

( )

Mr. Prateek Thakral

Assistant Professor

Computer Science & Engineering

Dated: May 26, 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Candidate's Declaration

I hereby declare that the work presented in this report entitled " **ROAD LANE LINE DETECTION** " is in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my work carried out over a period from January 2022 to May 2022 under the supervision of **Mr. Prateek Thakral** (Assistant Professor) in Department of Computer Science & Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

( )
Shubham Minhas, 181472.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

( )
Mr. Prateek Thakral
Assistant Professor
Computer Science & Engineering
Dated: May 17, 2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT •
IQAC

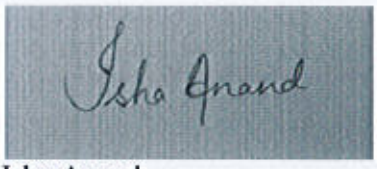
Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Internship /Training Report"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology**,** Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from February 2022 to May 2022 under the supervision of **Mr. Aman Choudhary** Assistant Manager ,Security Software Development ,RTDS.

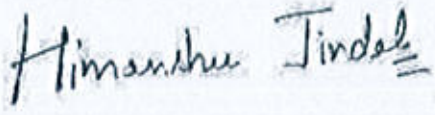
The matter embodied in the report has not been submitted for the award of any other degree or diploma.



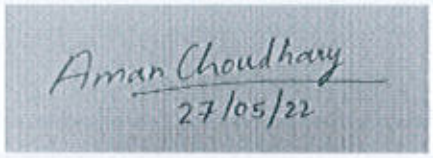
Isha Anand

181473

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



Dr. Himanshu Jindal
Assistant Professor CSE & IT
Dated: 27/05/2022



Aman Choudhary
Assistant Manager
Security Software Development ,
RTDS

Dated: 27/05/2022

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Credit Card Fraud Detection" is in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Manik Sayal during the period from January 2022 to May 2022 under the supervision of Dr. Jagpreet Sidhu, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Manik Sayal 181474

The above statement made is correct to the best of my knowledge.

Dr. Pardeep Kumar Khokkar
Associate Professor.
Computer Science & Engineering and Information Technology
Jaypee University of Information Technology, Waknaghat

Candidate's Declaration

I hereby declare that the work presented in this report titled "Internship Report" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period of six months beginning in August of this year.Under the supervision of Purbita Mukherjee(Trainer At Cognizant)

The report's contents have not been submitted for the granting of any other degree or certificate.

(Student Signature)

Student Name:Preetish Gujral

Roll no.:181475

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Supervisor Name:Dr Pardeep Kumar Khokkar

Associate Professor

Dated:13/05/2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Three Layer Architecture in GO"** in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Kashish Gupta (181476) during the period from 7 Feb & 2022 to 29 May under the supervision of **Dr.Rajni,** Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Kashish Gupta
(181262)

The above statement made is correct to the best of my knowledge.

Dr.Rajni
Assistant Professor (SG)
Computer Science & Engineering and Information Technology
JUIT, Waknaghat

Mithali R Shetty
Senior Lead Engineer
Zopsmart Technology

Dated: 27-05-21

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "**Ecommerce Web API Testing and Automation** " in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **Jaspreet Singh(181477),Avirukh Dahiya(181462)** during the period from January 2022 to May 2022 under the supervision of Dr. Amit Kumar, Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Dr. Amit Kumar
Assistant Professor(SG)
Computer Science & Engineering and Information Technology Jaypee University of Information Technology, Waknaghat

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled "CONTENT BASED MOVIE RECOMMENDATION SYSTEM" in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Wakanaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr Amol Vasudeva**(Assistant Professor(SG)). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Harshit Sharma
181483
Sachin Sharma
181478

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr Amol Vasudeva
Assistant Professor
Computer Science & Engineering
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled "Rxlogix,Noida " in partial fulfilment of the requirements for the award of the degree of B.Tech in Information Technology and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by Harsh Garg during the said period; February 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Harsh Garg and Rxlogix, Noida, Uttar Pradesh dated 7th February, 2022.

Harsh Garg

(181479)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned by TapScanner

Jaypee University of Information Technology Waknaghat, Solan-173234, Himachal Pradesh

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**Hand-Write Virtual board.**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **(DR. PARDEEP KUMAR)**(Associate Professor in the Department of Computer Science & Engineering).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)
ARSHIT YADAV, 181469

Prateek

PRATEEK SHARMA, 181482

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Pardeep Kumar 30/05/2022

(Supervisor Signature)
Supervisor Name: Dr. Pardeep Kumar
Designation: Associate Professor
Department name: Computer Science & Engineering

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled "CONTENT BASED MOVIE RECOMMENDATION SYSTEM" in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Wakanaghat is an authentic record of my own work carried out over a period from January 2022 to May 2022 under the supervision of **Dr Amol Vasudeva**(Assistant Professor(SG)). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Harshit Sharma
181483
Sachin Sharma
181478

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr Amol Vasudeva
Assistant Professor
Computer Science & Engineering
Dated:

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Environmental Data in Arduino Iot Cloud"** in partial fulfilmentof the requirements for the award of the degree of B.Tech in Information Technology and submitted to the Department of Computer Science Engineering and Information Technology, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Arushi (181461) and Harshita Sharma (181484)** during theperiod from January 2022 to May 2022 under the supervision of **Dr. Rajinder Sandhu,** Department of Computer Science Engineering and Information Technology, Jaypee University of Information Technology,Waknaghat.

Arushi (181461) Arushi

Harshita Sharma (181484) Harshita

The above statement made is correct to the best of my knowledge.

Rajinder 18/5/22

Dr. Rajinder Sandhu Assistant Professor (SG)

Computer Science Engineering and Information Technology,Jaypee University of Information Technology, Waknaghat.

(Asstt. Registrar (Academics))
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

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Department of Computer Science & Engineering and Information Technology

Jaypee University of Information Technology Waknaghat, Solan-173234, Himachal Pradesh

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Plant Detection Using Different Algorithms"** is in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the Department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my work carried out over a period from January 2022 to June 2021 under the supervision of Dr Vivek Kumar Sehgal Professor and Head of Department CSE.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Saksham Varma 181485)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

19/05/2022

Supervisor Name: Dr. Vipul Sharma
Designation: Assistant Professor (Grade-II)
Department Name: Computer Science & Engineering and Information Technology
Dated: 17-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Internship/ Training Report"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2021 to May 2021 under the supervision of **Ms. Niveditha (Trainer at Cognizant).**

Jain

Vidhita Jain (181486)

Ms. Niveditha
(Trainer at Cognizant).

DR. VIVEK SEHGAL
(SUPERVISOR)

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Big Mart Sales Prediction Using Machine Learning"** in partial fulfillment of the requirements for the award of the degree of B.Tech in CSE and submitted to the Department of CSE, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Khushi Agarwal (181487) during the period from January 2022 to May 2022 under the supervision of Dr. Ekta Gandotra Assistant Professor (SG), Department of CSE, Jaypee University of Information Technology, Waknaghat.

Khushi

Khushi Agarwal (181487)

The above statement made is correct to the best of our knowledge.

Ekta

Dr. Ekta Gandotra

Assistant Professor(S.G)

Computer Science & Engineering and Information Technology

Jaypee University of Information Technology

CERTIFICATE

This is to certify that the work which is being presented in the internship report titled **"Rxlogix,Noida "** in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of work carried out by **Gopesh Chawla** during the said period; February 2022 – till date, ensuring proper care towards the rules and regulations as specified by the Non-Disclosure Agreement signed between Gopesh Chawla and Rxlogix, Noida, Uttar Pradesh dated 7th February, 2022.

Gopesh Chawla

Gopesh Chawla (181488)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

DR. HIMANSHU JINDAL
(ASST. PROF (SG))
SUPERVISOR

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled "Sales Prediction using ARIMA model" is in partial fulfilment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Shaurya Pratap Singh and Shubham Tanodn during the period from January 2022 to May 2022 under the supervision of MR. Deepak Kumar Gupta , Department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat.

Shaurya Pratap Singh(181492)

Shubham Tandon(181240)

The above statement made is correct to the best of my knowledge.

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work titled "**Therapeutic potential of mushroom metabolites against non-structural proteins of SARS-CoV-2**", submitted by **"HANSIKA DHANJAL (181501)"** in partial fulfillment for the award of the degree of B. Tech in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

31/05/2022

Dr. Raj Kumar

Assistant Professor (Grade – II)
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India - 173234

Date: 31/05/2022

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Certificate

This is to certify that the work titled **"Investigation of potential inhibitors of nsp15 for COVID-19 treatment"** submitted by Arundhati Mehta (181502) in partial fulfillment for the award of the degree of B. Tech. in Bioinormatics of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award for this or any other degree or diploma.

31/05/2022

Dr. Raj Kumar
Assisstant Professor (Grade II)
"Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India – 173234"

IQAC

(Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.))

CERTIFICATE

This is to certify that the work titled "**Identification of Mushroom Metabolites as Potential Inhibitors of SARS-CoV-2 Nsp16 for COVID-19 Treatment**", submitted by **"BHOOMI SHARMA (181503)"** in partial fulfillment for the award of the degree of B. Tech in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

31/05/2022

Dr. Raj Kumar

Assistant Professor (Grade – II)
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India - 173234

IQAC

Date: 31st May, 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to affirm that the project report entitled: "***Machine Learning based Cancer type Classification using NGS Data***" put together by Anas Malik is in its partial satisfaction for the award of level of Bachelor of Technology in Bioinformatics to Jaypee University of Information Technology, Waknaghat Solan, has been done under my watch

This work has not been submitted incomplete or completely to some other college or institution so as to accomplish any award or some other degree.

Signature..... 30/05/2022.....

Supervisor Name: **Dr. Tiratha Raj Singh**

Designation: **Associate professor**

Jaypee University of Information Technology

Waknaghat, Solan

Himachal Pradesh (173221)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

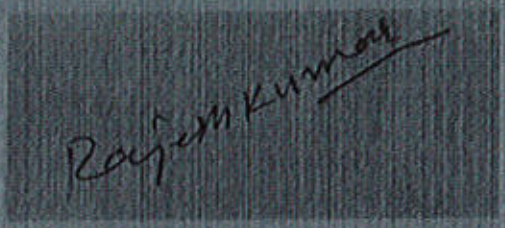
Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work titled "**Market Research on Prostate Cancer – Disease Overview, Epidemiology, and Market Assessment**" submitted by "**Dron Saklani**" in partial fulfillment for the award of degree of B.Tech Bioinformatics of Jaypee University of Information Technology (JUIT), Waknaghat has been carried out under our supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Name and Signature of Supervisor (s)

Date: 14-05-2020



Dr. Tiratha Raj Singh (Associate professor)

Rajesh Kumar (Team manager)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"TREM 2 AND IT'S VARIANTS ANALYSIS IN NEURODEGENERATIVE DISORDERS LIKE ALZHEIMER'S DISEASE"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Bioinformatics submitted in the department of Biotechnology and Bioinformatics and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from July 2021 to May 22, 2022 under the supervision of **Dr. Tiratha Raj Singh**, Associate Professor (Senior Grade), Department of Biotechnology and Bioinformatics JUIT, Waknaghat Solan, H.P., India.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kushal Chakraborty (181507)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Tiratha Raj Singh
Department of BT and BI JUIT
Waknaghat, Solan, H.P., India
Dated: 28/05/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Estimation and Design of Formwork and Scaffold for G+4 Building** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by Yamit Dhalaik (181602) and Ritik (181663) during a period from August, 2021 to May, 2022 under the supervision of **Mr. Akash Bhardwaj** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date- 14 May 2022

Signature of Supervisor

Mr. Akash Bhardwaj

Assistant Professor

Department of Civil engineering

JUIT, Waknaghat

16/5/22

Signature of HOD

Dr. Ashish Kumar

Professor and Head

Department of Civil engineering

JUIT, Waknaghat

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"GREEN BUILDINGS"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Ujjwal Kumar (181603)** during a period from July, 2021 to May, 2022 under the supervision of **Prof.(Dr.) Ashish Kumar** (Head of Department), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

14/5/22

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Design and Analysis of Warehouse Using STAAD PRO** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Harshit Thakur (181604) and Yash Gupta (181642)** during a period from August 2021 to May 2022 under the supervision of **Mr. KAUSHAL KUMAR** Department of civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge

Date: 19/05/2022

Kaushal Kumar 19/05/2022

Signature of Supervisor

Mr. Kaushal Kumar

Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

19/5/22

Signature of HOD

Dr. Ashish Kumar

Professor and Head of

Department of Civil Engineering

JUIT, Waknaghat

IQAC

Assistant Registrar (Academic)

28.05.2022

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Estimation and costing of a building** "in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Shubham(181605) & Varun Kapil(181606)** during a period fromJanaury,2022 to May, 2022 under the supervision of **Dr. Arnav Anuj Kasar** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 16/05/2022

Signature of Supervisor

Dr. Arnav Anuj Kasar

Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

19/5/22

Signature of HOD

Dr. Ashish Rohila

Professor and Head of

Department of Civil Engineering

JUIT, Waknaghat

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Estimation and costing of a building "** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Shubham(181605) & Varun Kapil(181606)** during a period fromJanaury,2022 to May, 2022 under the supervision of **Dr. Arnav Anuj Kasar** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 16/05/2022

Signature of Supervisor

Dr. Arnav Anuj Kasar

Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

19/5/22

Signature of HOD

Dr. Ashish Rohila

Professor and Head of

Department of Civil Engineering

JUIT, Waknaghat

Assistant Registrar (Acad.)
Jaypee University of Information
Technology, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"UTILIZATION OF WASTE MATERIALS IN THE CONSTRUCTION OF RIGID PAVEMENT"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Sonam Dorji (181647), Sonam Tshering (181650) and Abhay Sharma (181607)** during a period from July 2021 to May 2022 under the supervision of **Dr. Amardeep** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14/5/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P.
IQAC

14/05/22

Signature of Supervisor

Prof (Dr.) Amardeep

Assistant Professor (Senior Grade)

Department of Civil Engineering

JUIT, Waknaghat

27/5/22

Signature of HOD

Prof (Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

PLAGIARISM VERIFICATION REPORT

Date: 14/05/2022

Type of Document (Tick): PhD Thesis | M.Tech Dissertation/ Report | B.Tech Project Report ✓ | Paper

Name: Sonam Dorji & Sonam Tshering & Abhay sharma Department: Civil Enrolment No 181647 181650 181607

Contact No. 8268958893 E-mail. 181647@juit.ac.in

Name of the Supervisor: Dr. Amardeep

Title of the Thesis/Dissertation/Project Report/Paper (In Capital letters):

UTILIZATION OF WASTE MATERIALS IN THE CONSTRUCTION OF RIGID PAVEMENT.

UNDERTAKING

I undertake that I am aware of the plagiarism related norms/ regulations, if I found guilty of any plagiarism and copyright violations in the above thesis/report even after award of degree, the University reserves the rights to withdraw/revoke my degree/report. Kindly allow me to avail Plagiarism verification report for the document mentioned above.

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Assistant Professor (Senior Grade)
Jaypee University of Information Technology
Waknaghat, Distt. Solan H.P.

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Force base Vs Displacement base Seismic analysis of a 5 storey RC building"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Aniket (181608), Rohit Lakhera (181619)** during a period from August, 2021 to May, 2022 under the supervision of **Dr. Tanmay Gupta** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14th May 2022

Dr. Tanmay Gupta	Dr. Ashish Kumar	Head Examiner
Assistant Professor	Professor and head	
Department of Civil	Department of Civil	
Engineering	Engineering	
JUIT, Waknaghat	JUIT, Waknaghat	

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Foreshock Effect On Elevated Water Tank** "in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghatis** an authentic record of work carried out by **Aditya Chauhan (181633) and Vishal Garg (181610)** during a period from July 2021 to May 2022, under the supervision of **Dr.Tanmay Gupta** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14 May 2022

Dr.Tanmay Gupta	Prof.(Dr.) Ashish Kumar	Head Examiner
Assistant Professor	Professor & Head of Department	
Department of Civil Engineering	Department of Civil Engineering	
JUIT, Waknaghat	JUIT, Waknaghat	

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"SEISMIC DEMAND CALCULATIONS FOR AN ELEVATOR"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **MADHVENDER SINGH(181611) and ABHAY KANWAR (181618)** on May 2022 under the supervision of **Dr. SUGANDHA SINGH** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 20/5/22

Dr. Sugandha Singh
Department of Civil Engineering
JUIT, Waknaghat

20/5/22
Dr. Ashish Kumar
Head of Department of Civil Engineering
JUIT,Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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CERTIFICATE

This is to certify that the work which is being presented in the project report titled **DESIGN AND STABILITY ANALYSIS OF GRAVITY DAM USING STAAD PRO SOFTWARE** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by Gaurav Sharma during a period from August, 2021 to December ,2021 under the supervision of Mr. **Niraj Singh Parihar** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date:-14-5-22

19-5-22

Mr. Niraj Parihar

Assistant Professor
Department of Civil Engineering
JUIT, Waknaghat

19/5/22

Dr. Ashish Kumar

Professor and Head
Department of Civil Engineering
JUIT, Waknaghat

26.5.2022

External Examiner

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Certificate

This is to certify that the work which is being presented in the project report titled "**Pushover Analysis of a Residential Building**" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Sushant (181616) and Rishabh Jaswal (181613) during a period from July 2021 to May , 2022 under the supervision of Mr. Chandra Pal Gautam (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Chandra Pal 19/05/22

Mr.Chandra Pal Gautam

Assistant professor
of Civil Engineering

JUIT , Waknaghat

19/5/22

Prof.(Dr.) Ashish Kumar

Professor & Head of Department
Department of Civil Engineering

JUIT , Waknaghat

CERTIFICATE

This is to certify that the work which we have presented in the project report titled **"Developing & Analyzing the model of railway underpass by Box Pushing Technique"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Vishali Thapta (181614) & Saijal Verma (181657)** during a period from July 2021 to December 2021 under the supervision of **Dr. Ashok Kumar Gupta & Mr. Akash Bhardwaj**. Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best as per our knowledge.

Date: 15 May 2022

19/05/2022	16/5/22	19/5/22
Signature of Supervisor	Signature of Supervisor	Signature of HOD
Name: Dr. Ashok Kumar Gupta	Name:Mr. Akash Bhardwaj	Name: Dr. Ashish Kumar
DEAN (Academics and Research)	Assistant Professor	Professor & Head
JUIT, Wakhnaghat	Department of Civil Engineering	Department of Civil Engineering
	JUIT,Wakhnaghat	JUIT, Wakhnaghat

Assistant Registrar (Academic) Jaypee University of Information Technology Waknaghat, Distt. Solan

IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"MODELLING AND SEISMIC ANALYSIS OF 5-STORY BUILDING"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **ARNAV RAWAT (181632) and ABHAY KAITH (181615)** during a period from July 2021 to May, 2022 under the supervision of **Dr. Ashok Kumar Gupta** (Professor and Dean) and **Mr. Rohan Singhal** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 30/5/22

Dr. Ashok Kumar Gupta	Mr. Rohan Singhal	Prof.(Dr.) Ashish Kumar
Professor and Dean	Assistant professor	Professor and Head of Department
Department of Civil Engineering	Department of Civil Engineering	Department of Civil Engineering
JUIT, Waknaghat	JUIT, Waknaghat	JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Certificate

This is to certify that the work which is being presented in the project report titled "**Pushover Analysis of a Residential Building**" in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by Sushant (181616) and Rishabh Jaswal (181613) during a period from July 2021 to May , 2022 under the supervision of Mr. Chandra Pal Gautam (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Chandra Pal 19/05/22

Mr.Chandra Pal Gautam

Assistant professor
of Civil Engineering

JUIT , Waknaghat

19/5/22

Prof.(Dr.) Ashish Kumar

Professor & Head of Department
Department of Civil Engineering

JUIT , Waknaghat

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Analysis And Design of G+4 Building on STAAD Pro And Comparison Study"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Wakhnghat** is an authentic record of work carried out **by Ritik Kumar Puri (181617) and Utkarsh (181627)** during a period from August 2021 to May, 2022 under the supervision of **Dr. Saurav** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Wakhnghat.

The above statement made is correct to the best of our knowledge.

Date: May 2022 17-5-22

Saurav 17/5/22

Dr. Saurav

Assistant Professor

Department of Civil Engineering

JUIT, Wakhnghat

Signature of HOD 17/5/22

Dr. Ashish Kumar

Department of Civil Engineering

JUIT, Wakhnghat

28.05.2022

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Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"SEISMIC DEMAND CALCULATIONS FOR AN ELEVATOR"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **MADHVENDER SINGH(181611) and ABHAY KANWAR (181618)** on May 2022 under the supervision of **Dr. SUGANDHA SINGH** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 20/5/22

Dr. Sugandha Singh
Department of Civil Engineering
JUIT, Waknaghat

20/5/22
Dr. Ashish Kumar
Head of Department of Civil Engineering
JUIT,Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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CERTIFICATE

This is to certify that the work which is being presented in the project report titled "**Force base Vs Displacement base Seismic analysis of a 5 storey RC building**" in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Aniket (181608), Rohit Lakhera (181619)** during a period from August, 2021 to May, 2022 under the supervision of **Dr. Tanmay Gupta** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14th May 2022

Dr. Tanmay Gupta	Dr. Ashish Kumar	Head Examiner
Assistant Professor	Professor and head	
Department of Civil Engineering	Department of Civil Engineering	
JUIT, Waknaghat	JUIT, Waknaghat	

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"PERFORMANCE EVALUATION OF POLYETHYLENE TEREPHTHALATE (PET) GEOCELL REINFORCED MUNICIPAL SOLID WASTE PAVEMENT LAYER: A FINITE ELEMENT (FE) NUMERICAL STUDY"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Hemang Jandrotia (181660) and Atul Vashisht (181621)** during a period from January 2021 to May 2022 under the supervision of **Dr. Saurabh Rawat**, Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 18-05-22

Saurabh 18-05-2022 [Supervisor]

Dr. Saurabh Rawat
Assistant Professor
Department of Civil Engineering
JUIT Waknaghat

Ashish 18/5/22

Dr. Ashish Kumar
Professor and Head of Department
Department of Civil Engineering
JUIT Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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This is to certify that the work which is being presented in the project report titled **"GREEN BUILDING DESIGN AND ANALYSIS"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **AYUSH SHARMA (181662) , NAVNEET SHARMA(181622)** during a period from January 2022 to May , 2022 under the supervision of **DR. ARNAV ANUJ KASAR** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge

Date: 16/05/2022

Signature of Supervisor	Signature of HOD 16/5/22
Dr. Arnav Anuj Kasar	Dr. Ashish Rohilla
(Assistant Professor)	(Professor)
Department of Civil Engineering	Department of Civil Engineering

28.05.2022

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"DESIGN OF WATER TANK USING STAAD_PRO V8i"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Ayush Thakur(181631) , Deepak Sharma(181623)** during a period from August to December, 2021 under the supervision of **Dr. Rishi Rana** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Date: 14, May 2022

Signature

17/5/22

Dr. Rishi Rana

Assistant Professor-SG

Department of Civil Engineering

JUIT, Waknaghat

Prof.(Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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CERTIFICATE

This is to certify that the work which is being presented in the project report titled **DESIGN AND STABILITY ANALYSIS OF GRAVITY DAM USING STAAD PRO SOFTWARE** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by Gaurav Sharma during a period from August, 2021 to December ,2021 under the supervision of Mr. **Niraj Singh Parihar** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date:-14-5-22

19-5-22

Mr. Niraj Parihar

Assistant Professor
Department of Civil Engineering
JUIT, Waknaghat

19/5/22

Dr. Ashish Kumar

Professor and Head
Department of Civil Engineering
JUIT, Waknaghat

26.5.2022

External Examiner

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"CONVERTING EXISTING BUILDING INTO GREEN BUILDING"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Muskan Negi (181626) and Abhishek Sharma (181637)** during a period from January, 2022 to May, 2022 under the supervision of **Mr. Chandrapal (Assistant Professor),** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Date: 16-05-2022

Chandrapal 19/5/22

Mr. Chandrapal Gautam
Assistant Professor
Department of Civil Engineering
JUIT, Waknaghat

19/5/22

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academic)
Jaypee University of Information Technology
Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Analysis And Design of G+4 Building on STAAD Pro And Comparison Study"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Wakhnghat** is an authentic record of work carried out **by Ritik Kumar Puri (181617) and Utkarsh (181627)** during a period from August 2021 to May, 2022 under the supervision of **Dr. Saurav** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Wakhnghat.

The above statement made is correct to the best of our knowledge.

Date: May 2022 17-5-22

Saurav 17/5/22

Dr. Saurav

Assistant Professor

Department of Civil Engineering

JUIT, Wakhnghat

17/5/22

Signature of HOD

Dr. Ashish Kumar

Department of Civil Engineering

JUIT, Wakhnghat

28.05.2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY IQAC WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Comparision of Traditional and Concrete bricks"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghatis** an authentic record of work carried out by **Suryansh Singh (181629) and Sahil Negi (181638)** during a period from July 2021 to May 2022, under the supervision of **Mr. Rohan Singhal** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14 May 2022

Mr. Rohan Singhal	Prof.(Dr.) Ashish Kumar	Head, Examiner
Assistant Professor	Professor & Head of Department	
Department of Civil Engineering	Department of Civil Engineering	
JUIT, Waknaghat	JUIT, Waknaghat	

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"FACTORS AFFECTING SUPPLIER PERFORMANCE AND SELECTION IN CONSTRUCTION PROJECTS"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Civil Engineering** submitted to the **Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Pranav Dogra (181643)** and **Bhuvan Walia (181630)** during a period from August,2021 to May,2022 under the supervision **of Mr. Akhilesh Gandhi (Assistant Professor)**, Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 11May, 2022

19/05/2022

Signature of Supervisor

Name: Mr. Akhilesh Gandhi

Designation: Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

19/5/22

Signature of HoD

Name: Prof (Dr.) Ashish Kumar

Professor and Head of Department

Department of Civil Engineering

JUIT, Waknaghat

Signature of External Examiner

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"DESIGN OF WATER TANK USING STAAD_PRO V8i"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Ayush Thakur(181631) , Deepak Sharma(181623)** during a period from August to December, 2021 under the supervision of **Dr. Rishi Rana** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Date: 14, May 2022

Signature

17/5/22

Dr. Rishi Rana

Assistant Professor-SG

Department of Civil Engineering

JUIT, Waknaghat

Prof.(Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"MODELLING AND SEISMIC ANALYSIS OF 5-STORY BUILDING"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **ARNAV RAWAT (181632) and ABHAY KAITH (181615)** during a period from July 2021 to May, 2022 under the supervision of **Dr. Ashok Kumar Gupta** (Professor and Dean) and **Mr. Rohan Singhal** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 30/5/22

30/5/22	Singhal	
Dr. Ashok Kumar Gupta	Mr. Rohan Singhal	Prof.(Dr.) Ashish Kumar
Professor and Dean	Assistant professor	Professor and Head of Department
Department of Civil Engineering	Department of Civil Engineering	Department of Civil Engineering
JUIT, Waknaghat	JUIT, Waknaghat	JUIT, Waknaghat

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Foreshock Effect On Elevated Water Tank** "in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghatis** an authentic record of work carried out by **Aditya Chauhan (181633) and Vishal Garg (181610)** during a period from July 2021 to May 2022, under the supervision of **Dr.Tanmay Gupta** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14 May 2022

Dr.Tanmay Gupta	Prof.(Dr.) Ashish Kumar	Head Examiner
Assistant Professor	Professor & Head of Department	
Department of Civil Engineering	Department of Civil Engineering	
JUIT, Waknaghat	JUIT, Waknaghat	

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Finite element analysis of underground storage tank"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Amish Kartik(181645), Priyanshu Sharma(181634)** during a period from January 2022 to May 2022 under the supervision of **Mr. Kaushal Kumar** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement is correct to the best of our knowledge.

Kaushal Kumar 19/05/2022

Signature of Supervisor

Mr. Kaushal Kumar
Assistant Professor
Department of Civil Engineering
JUIT Waknaghat

19/5/22

Signature of HOD

Prof. (Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT Waknaghat

28.05.2022

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"COMPARATIVE STUDY ON THE EFFECT OF SLOPES ON A BUILDING IN DIFFERENT SEISMIC ZONES"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Rakshit Sharma (181635) and Anushka Anand (181644)** during a period from August 2021 to May, 2022 under the supervision of **Prof.(Dr.) Ashish Kumar** (Professor & Head of Department of Civil Engineering), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

19/5/22

Signature of Supervisor

Prof. (Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"CONVERTING EXISTING BUILDING INTO GREEN BUILDING"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Muskan Negi (181626) and Abhishek Sharma (181637)** during a period from January, 2022 to May, 2022 under the supervision of **Mr. Chandrapal (Assistant Professor),** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Date: 16-05-2022

Chandra Pal 19/5/22

Mr. Chandrapal Gautam
Assistant Professor
Department of Civil Engineering
JUIT, Waknaghat

Ashish 19/5/22

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Comparision of Traditional and Concrete bricks"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghatis** an authentic record of work carried out by **Suryansh Singh (181629) and Sahil Negi (181638)** during a period from July 2021 to May 2022, under the supervision of **Mr. Rohan Singhal** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14 May 2022

Mr. Rohan Singhal	Prof.(Dr.) Ashish Kumar	Head, Examiner
Assistant Professor	Professor & Head of Department	
Department of Civil Engineering	Department of Civil Engineering	
JUIT, Waknaghat	JUIT, Waknaghat	

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"MICROPLASTIC DETECTION IN WATER USING IMAGE PROCESSING"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Abhinesh Thakur (181639) and Dechen Tshomo (181654)** during a period from August 2021 to May 2022 under the supervision of **Dr. Rishi Rana** (Assistant Professor, Senior Grade), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

Dr. Rishi Rana
Assistant Professor (Senior Grade)
Department of Civil Engineering
JUIT, Waknaghat

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Design and Analysis of Warehouse Using STAAD PRO** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Harshit Thakur (181604) and Yash Gupta (181642)** during a period from August 2021 to May 2022 under the supervision of **Mr. KAUSHAL KUMAR** Department of civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge

Date: 19/05/2022

Kaushal Kumar 19/05/2022

Signature of Supervisor

Mr. Kaushal Kumar

Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

19/5/22

Signature of HOD

Dr. Ashish Kumar

Professor and Head of

Department of Civil Engineering

JUIT, Waknaghat

Assistant Registrar (Academics)

28.05.2022

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"FACTORS AFFECTING SUPPLIER PERFORMANCE AND SELECTION IN CONSTRUCTION PROJECTS"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Civil Engineering** submitted to the **Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Pranav Dogra (181643)** and **Bhuvan Walia (181630)** during a period from August,2021 to May,2022 under the supervision **of Mr. Akhilesh Gandhi (Assistant Professor)**, Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 11May, 2022

19/05/2022

Signature of Supervisor

Name: Mr. Akhilesh Gandhi

Designation: Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

19/5/22

Signature of HoD

Name: Prof (Dr.) Ashish Kumar

Professor and Head of Department

Department of Civil Engineering

JUIT, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT IQAC

Signature of External Examiner

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"COMPARATIVE STUDY ON THE EFFECT OF SLOPES ON A BUILDING IN DIFFERENT SEISMIC ZONES"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Rakshit Sharma (181635) and Anushka Anand (181644)** during a period from August 2021 to May, 2022 under the supervision of **Prof.(Dr.) Ashish Kumar** (Professor & Head of Department of Civil Engineering), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

19/5/22

Signature of Supervisor

Prof. (Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Finite element analysis of underground storage tank"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Amish Kartik(181645), Priyanshu Sharma(181634)** during a period from January 2022 to May 2022 under the supervision of **Mr. Kaushal Kumar** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement is correct to the best of our knowledge.

Kaushal Kumar 19/05/2022

Signature of Supervisor

Mr. Kaushal Kumar
Assistant Professor
Department of Civil Engineering
JUIT Waknaghat

19/5/22

Signature of HOD

Prof. (Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT Waknaghat

28.05.2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"UTILIZATION OF WASTE MATERIALS IN THE CONSTRUCTION OF RIGID PAVEMENT"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Sonam Dorji (181647), Sonam Tshering (181650) and Abhay Sharma (181607)** during a period from July 2021 to May 2022 under the supervision of **Dr. Amardeep** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14/5/2022

14/05/22

Signature of Supervisor

Prof (Dr.) Amardeep

Assistant Professor (Senior Grade)

Department of Civil Engineering

JUIT, Waknaghat

27/5/22

Signature of HOD

Prof (Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

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Date: 14/05/2022

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Name: Sonam Dorji & Sonam Tshering & Abhay sharma Department: Civil Enrolment No 181647 181650 181607

Contact No. 8268958193 E-mail. 181647@juit.ac.in

Name of the Supervisor: Dr. Amardeep

Title of the Thesis/Dissertation/Project Report/Paper (In Capital letters):

Utilization of Waste Materials in the construction of rigid pavement.

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I undertake that I am aware of the plagiarism related norms/ regulations, if I found guilty of any plagiarism and copyright violations in the above thesis/report even after award of degree, the University reserves the rights to withdraw/revoke my degree/report. Kindly allow me to avail Plagiarism verification report for the document mentioned above.

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Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Utilization of Solar Energy For Residential Building"** in fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Passang Dorji (181648)** during a period from February 2022 to May 2022 under the supervision of **Prof. (Dr.) Ashish Kumar** (Head of Department), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 30/5/2022

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"ENERGY EFFICIENCY AND EFFECT OF REINFORCED CEMENT CONRETE WALL"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Phub Dorji (181649) and Tshering Gyeltshen (181651)** during a period from July 2019 to November, 2019 under the supervision of **Dr. Sugandha Singh** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14/05/2022

14/5/22

Dr. Sugandha Singh

Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

14/5/22

Prof.(Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

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Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"UTILIZATION OF WASTE MATERIALS IN THE CONSTRUCTION OF RIGID PAVEMENT"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Sonam Dorji (181647), Sonam Tshering (181650) and Abhay Sharma (181607)** during a period from July 2021 to May 2022 under the supervision of **Dr. Amardeep** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14/5/2022

14/05/22

Signature of Supervisor

Prof (Dr.) Amardeep

Assistant Professor (Senior Grade)

Department of Civil Engineering

JUIT, Waknaghat

27/5/22

Signature of HOD

Prof (Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

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PLAGIARISM VERIFICATION REPORT

Date: 14/05/2022

Type of Document (Tick): PhD Thesis | M.Tech Dissertation/ Report | B.Tech Project Report ✓ | Paper

Name: Sonam Dorji & Sonam Tshering & Abhay sharma Department: Civil Enrolment No 181647 181650 181607

Contact No. 8268958893 E-mail. 181647@juit.ac.in

Name of the Supervisor: Dr. Amardeep

Title of the Thesis/Dissertation/Project Report/Paper (In Capital letters):

Utilization of Waste Materials in the construction of rigid pavement.

UNDERTAKING

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Complete Thesis/Report Pages Detail:

- Total No. of Pages = 75
- Total No. of Preliminary pages = 16
- Total No. of pages accommodate bibliography/references = 2

(Signature of Student)

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(Signature of Guide/Supervisor)

Signature of HOD

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Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

IQAC

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"ENERGY EFFICIENCY AND EFFECT OF REINFORCED CEMENT CONRETE WALL"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Phub Dorji (181649) and Tshering Gyeltshen (181651)** during a period from July 2019 to November, 2019 under the supervision of **Dr. Sugandha Singh** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14/05/2022

14/5/22

Dr. Sugandha Singh

Assistant Professor

Department of Civil Engineering

JUIT, Waknaghat

14/5/22

Prof.(Dr.) Ashish Kumar

Professor & Head of Department

Department of Civil Engineering

JUIT, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"STRUCTURAL BEHAVIOUR EVALUATION OF CORRODED AND NON-CORRODED RCC BEAMS: AN EXPERIMENTAL AND NUMERICAL APPROACH"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Kinley Zam (181652)** and **Pema Yuden (181656)** during a period from August, 2021 to May, 2022 under the supervision of **Dr. Saurav** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

Saurav 14/5/22

Dr. Saurav
Assistant Professor
Department of Civil Engineering
JUIT, Waknaghat

Ashish 14/5/22

Dr. Ashish Kumar
Professor and Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
IQAC
WAKNAGHAT

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"REMEDIATION AND STABILIZATION OF SLOPE IN RELDRI, BHUTAN"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Sonam Tshewang Dema (181653) and Namgay Wangmo (181655)** during a period from August, 2021 to May, 2022 under the supervision of **Mr. Niraj Singh Parihar** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

14/05/22

Mr. Niraj Singh Parihar
(Assistant Professor)
Department of Civil Engineering
JUIT, Waknaghat

14/5/22

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"MICROPLASTIC DETECTION IN WATER USING IMAGE PROCESSING"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Abhinesh Thakur (181639) and Dechen Tshomo (181654)** during a period from August 2021 to May 2022 under the supervision of **Dr. Rishi Rana** (Assistant Professor, Senior Grade), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

Dr. Rishi Rana
Assistant Professor (Senior Grade)
Department of Civil Engineering
JUIT, Waknaghat

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Dist., Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"REMEDIATION AND STABILIZATION OF SLOPE IN RELDRI, BHUTAN"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Sonam Tshewang Dema (181653) and Namgay Wangmo (181655)** during a period from August, 2021 to May, 2022 under the supervision of **Mr. Niraj Singh Parihar** (Assistant professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

14/05/22

Mr. Niraj Singh Parihar
(Assistant Professor)
Department of Civil Engineering
JUIT, Waknaghat

14/5/22

Prof.(Dr.) Ashish Kumar
Professor & Head of Department
Department of Civil Engineering
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"STRUCTURAL BEHAVIOUR EVALUATION OF CORRODED AND NON-CORRODED RCC BEAMS: AN EXPERIMENTAL AND NUMERICAL APPROACH"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Kinley Zam (181652)** and **Pema Yuden (181656)** during a period from August, 2021 to May, 2022 under the supervision of **Dr. Saurav** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of our knowledge.

Date: 14-05-2022

Saurav 14/5/22

Dr. Saurav
Assistant Professor
Department of Civil Engineering
JUIT, Waknaghat

Ashish 14/5/22

Dr. Ashish Kumar
Professor and Head of Department
Department of Civil Engineering
JUIT, Waknaghat

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY IQAC WAKNAGHAT

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which we have presented in the project report titled **"Developing & Analyzing the model of railway underpass by Box Pushing Technique"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Vishali Thapta (181614) & Saijal Verma (181657)** during a period from July 2021 to December 2021 under the supervision of **Dr. Ashok Kumar Gupta & Mr. Akash Bhardwaj**. Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best as per our knowledge.

Date: 15 May 2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
IQAC

19/05/2022	16/5/22	19/5/22
Signature of Supervisor	Signature of Supervisor	Signature of HOD
Name: Dr. Ashok Kumar Gupta	Name:Mr. Akash Bhardwaj	Name: Dr. Ashish Kumar
DEAN	Assistant Professor	Professor & Head
(Academics and Research)	Department of Civil Engineering	Department of Civil Engineering
JUIT, Wakhnaghat	JUIT,Wakhnaghat	JUIT, Wakhnaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Design and Analysis of Gravity Dam"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Deval (181661) and Nikhil Sharma (181659)** during a period from August, 2021 to May, 2022 under the supervision of **Dr. Saurav,** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-5-2022

Saurav 14/5/22

Dr. Saurav
Assistant Professor
Civil Engineering Department
JUIT, Waknaghat

Ashish 14/5/22

Prof. (Dr.) Ashish Kumar
Professor and Head
Civil Engineering Department
JUIT, Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"PERFORMANCE EVALUATION OF POLYETHYLENE TEREPHTHALATE (PET) GEOCELL REINFORCED MUNICIPAL SOLID WASTE PAVEMENT LAYER: A FINITE ELEMENT (FE) NUMERICAL STUDY"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Hemang Jandrotia (181660) and Atul Vashisht (181621)** during a period from January 2021 to May 2022 under the supervision of **Dr. Saurabh Rawat**, Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 18-05-22.

Saurabh 18-05-2022
[Supervisor]

Dr. Saurabh Rawat
Assistant Professor
Department of Civil Engineering
JUIT Waknaghat

Ashish 18/5/22

Dr. Ashish Kumar
Professor and Head of Department
Department of Civil Engineering
JUIT Waknaghat

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"Design and Analysis of Gravity Dam"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Deval (181661) and Nikhil Sharma (181659)** during a period from August, 2021 to May, 2022 under the supervision of **Dr. Saurav,** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date: 14-5-2022

Saurav 14/5/22

Dr. Saurav
Assistant Professor
Civil Engineering Department
JUIT, Waknaghat

Ashish 14/5/22

Prof. (Dr.) Ashish Kumar
Professor and Head
Civil Engineering Department
JUIT, Waknaghat

Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"GREEN BUILDING DESIGN AND ANALYSIS"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **AYUSH SHARMA (181662) , NAVNEET SHARMA(181622)** during a period from January 2022 to May , 2022 under the supervision of **DR. ARNAV ANUJ KASAR** (Assistant Professor), Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge

Date: 16/05/2022

Signature of Supervisor	Signature of HOD
Dr. Arnav Anuj Kasar	Dr. Ashish Rohilla
(Assistant Professor)	(Professor)
Department of Civil Engineering	Department of Civil Engineering

16/5/22

28.05.2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • H.P.
IQAC
Assistant Registrar (Academic)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **Estimation and Design of Formwork and Scaffold for G+4 Building** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by Yamit Dhalaik (181602) and Ritik (181663) during a period from August, 2021 to May, 2022 under the supervision of **Mr. Akash Bhardwaj** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat.

The above statement made is correct to the best of our knowledge.

Date- 14 May 2022

Signature of Supervisor

Mr. Akash Bhardwaj

Assistant Professor

Department of Civil engineering

JUIT, Waknaghat

16/5/22

Signature of HOD

Dr. Ashish Kumar

Professor and Head

Department of Civil engineering

JUIT, Waknaghat

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Dist. Solan (H.P.)

CERTIFICATE

This is to certify that the work titled "**Evaluation of 16S rRNA gene sequencing for analysis of bacterial isolates**" submitted by "Ms. **Rhea Singh**" in partial fulfillment for the award of the degree of B. Tech Biotechnology of Jaypee University of Information Technology, Waknaghat has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Signature of Supervisor .....

Name of Supervisor Dr. Jitendraa Vashishtt

Designation Associate Professor

Date 30th May 2022

CERTIFICATE

This is to certify that the work titled "**PATENT ANALYSIS AND SEARCHING TECHNIQUES**", submitted by **Simran Gohan (181802)** in partial fulfillment for the award of degree of B. Tech in Biotechnology at Jaypee University of Information Technology, Solan has been carried out under the supervision of **Mr. Punit Talwar** (Manager) Talwar and Talwar Consultants and Services Pvt. Ltd., Mohali and **Dr. Rahul Shrivastava** (Associate Professor), Department of Biotechnology and Bioinformatics, JUIT. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Simran Gohan
(181802)

Dr. Rahul Shrivastava
Associate Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India - 173234

Date: 31/5/22

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the project titled "Exploring the Bioleaching Potential of Indigenous Bacterial Isolate and *Chromobacterium violaceum*" submitted by **Prarthna Kashyap (181803)** carried out under my supervision for the award of the degree of B. Tech in Biotechnology from Jaypee University of Information Technology. This work has not been submitted to any other university or institute for an award for this degree or any other degree.

30/05/2022

Signature of Supervisor

Name of supervisor: Dr. Sudhir K. Syal

Designation: HOD and Professor

Department of Biotechnology and Bioinformatics

Jaypee university of information technology

Waknaghat (HP)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work reported in the Bachelor of Technology academic report submitted by **Samya Khanna,**

in partial fulfillment for the award of degree of B.Tech. Biotechnology from **Jaypee University of Information & Technology, Waknaghat** has been carried out under my supervision. This report was not submitted to any other University or Institute in full or in part for the award of any other degree, certificate or other titles.

Mr. Arun Gupta

Associate Principal

Roots Analysis

Date: 17th May 2021

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that the work reported in the B. Tech. thesis entitled **"Processing and Structuring the meat analogue by using plant-based derived composites"**, submitted by Astha Singh(181805) and Anirudh Joshi(181833) at Jaypee University of Information Technology, Waknaghat, India, is a bonafide record of their original work carried out under my supervision. This work has not been submitted elsewhere for any other degree or diploma.

G. Vijay Kumar 30/05/2022

(Signature of Supervisor)

Dr. Garlapati Vijay Kumar

Associate Professor

Department of Biotechnology and Bioinformatics

JUIT, HP-173234,India.

CERTIFICATE

This is to certify that the work which is being presented in the title of **"Study on Natural Antimicrobial Compounds against Bacterial Isolates "** for the end semester of B. Tech. in Biotechnology and submitted in the department of Biotechnology and Bioinformatics, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by Sakshi (181806) during the period of July 2021 to May 2022 under the supervision of **Dr. Jitendraa Vashistt,** Associate Professor, Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology, Waknaghat , Solan (H.P.)

The above statement made is correct to the best of my knowledge.

Date : 30th May 2022

Dr. Jitendraa Vashistt
Associate Professor
Department of Biotechnology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

TTCONSULTANTS
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Phone: +91 172-6459347, +1.347.284.6413
www.ttconsultants.com
hr@ttconsultants.com

Ref. No: HRD/REC/TTC/135/2022

Date: 13 May 2022

TRAINING LETTER

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Yogesh Joshi (Employee Code: TTC-623) is working with Talwar & Talwar Consultants Pvt. Ltd. since 7 February 2022 as Intern- PRW.

Till now, his performance has been satisfactory.

We wish him all the best for future endeavors.

For Talwar & Talwar Consultants Pvt. Ltd.,

Sna Rikhi
Authenticated through Leegality.com (EPLGUA3)
Sna Rikhi
Date: Fri May 13 15:04:27 IST 2022

Authorized Signatory

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that work title **"Production of novel fungal phytase and it's applications"** by **Megha Tushir, Shubham Dogra and Abhinav Dharmani** during the end semester in June 2022 in fulfillment for the award of degree of Bachelor of Technology in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has been submitted partially or wholly to any other University or Institute for the award of any degree or appreciation.

.....

Signature of Supervisor

Dr. Saurabh Bansal

(Assistant Professor)

SUPERVISOR'S CERTIFICATE

This is to certify that the content of this research project entitled "SCREENING OF PHYTOCHEMICALS IN SHOOT CULTURES OF ENDANGERED HERB- *GENTIANA KURROO* ROYLE" by Ms. Ipshita Dutta is her bona fide work carried out under my supervision, of Biotechnology and Bioinformatics branch at Jaypee University of Information Technology, Solan in the academic year 2021-22 for the fulfillment of the requirements of B.Tech Major Project. Based on the declaration made by her, I recommend this project report for evaluation.

30/5/2022

Signature of the Supervisor

Name- Dr. Hemant Sood

Associate Professor, Department of Biotechnology and Bioinformatics, JUIT

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that the work titled "Development of Anti-Acne Gel from Withania Somnifera" by Anushka Priya, Shubhangi Kumar, Srishti Roy during the 8th semester in Jan-May 2022 in fulfilment for the award of degree of Bachelors of Technology in Bio- technology from Jaypee University of Information Technology, Solan has been carried out under my supervision. This work can be sent totally or partially to any other university or college to obtain any degree or recognition.

30/5/22

Signature of Supervisor

Name of supervisor: Dr Udayabanu Malairaman

Designation: Associate Professor

Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology

Waknaghat, Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

I, hereby declare that the work presented here in this report entitled **"ASSESSMENT OF GREEN SYNTHESIS OF SILVER NANOPARTICLES BY GARLIC AND POTATO PEEL EXTRACT"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Biotechnology submitted in the department of Biotechnology and Bioinformatics, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out under the supervision of Dr. Abhishek Chaudhary (Assistant Professor in the Department of Biotechnology and Bioinformatics). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kiara Tickoo
(181817)

Kriti Ahuja
(181812)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that the work titled "Synthesis of silver nanoparticles via green synthesis by potato and garlic peels "by Kiara Tickoo and Kriti Ahuja during the end semester in June 2022 in fulfilment for the award of degree of Bachelors of Technology in Biotechnology of Jaypee University of Information Technology ,Solan has been carried out under my supervision .

Signature of Supervisor

Name of supervisor: Dr Abhishek Chaudhary
Designation: Associate Professor

Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology
Waknaghat, Solan(H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • SOLAN
IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that the work titled "Development of Anti-Acne Gel from Withania Somnifera" by Anushka Priya, Shubhangi Kumar, Srishti Roy during the 8th semester in Jan-May 2022 in fulfilment for the award of degree of Bachelors of Technology in Bio- technology from Jaypee University of Information Technology, Solan has been carried out under my supervision. This work can be sent totally or partially to any other university or college to obtain any degree or recognition.

30/5/22

Signature of Supervisor

Name of supervisor: Dr Udayabanu Malairaman

Designation: Associate Professor

Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology

Waknaghat, Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that the work reported in the B. Tech. thesis entitled "Bioethanol Production from Papaya Waste", submitted by Kannu Priya (181814) at Jaypee University of Information Technology, Waknaghat, India, and is a bonafide record of their original work carried out under my supervision. This work has not been submitted elsewhere for any other degree or diploma.

01/06/22

(Signature of Supervisor)

Dr. Garlapati Vijay Kumar

Associate Professor

Department of Biotechnology and Bioinformatics

JUIT, Waknaghat, HP-173234,India.

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work titled "**Landscape Analysis of Intellectual Property**", submitted by **Soumya Jain (181815)** in partial fulfilment for the award of degree of B. Tech in Biotechnology at Jaypee University of Information Technology; Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Jain
Soumya Jain
(181815)

Dr. Jata Shankar J Shankar 31/5/2022

Associate Professor

Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology (JUIT)

Waknaghat, Solan, India - 173234

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Date: 28-05-2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work entitled **"Cultivation and screening of microalgal strains for enhanced biomass production using enzymatic treatment"** pursued by Shagun Sharma (181823) and Kanishk Bhatt (181816) for the partial fulfilment of degree Bachelor of Technology in Biotechnology from Jaypee University of Information Technology, Waknaghat has been carried out under my supervision. This part of work has not been submitted partially or wholly to any other University or Institute for the award of any degree or appreciation.

01.06.2022

Dr. Ashok Kumar Nadda
Assistant Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology
Waknaghat, Solan-173234
Himachal Pradesh, India

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

CERTIFICATE

I, hereby declare that the work presented here in this report entitled **"ASSESSMENT OF GREEN SYNTHESIS OF SILVER NANOPARTICLES BY GARLIC AND POTATO PEEL EXTRACT"** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Biotechnology submitted in the department of Biotechnology and Bioinformatics, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out under the supervision of Dr. Abhishek Chaudhary (Assistant Professor in the Department of Biotechnology and Bioinformatics). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Kiara Tickoo
(181817)

Kriti Ahuja
(181812)

SUPERVISOR'S CERTIFICATE

This is to certify that the work titled "Synthesis of silver nanoparticles via green synthesis by potato and garlic peels "by Kiara Tickoo and Kriti Ahuja during the end semester in June 2022 in fulfilment for the award of degree of Bachelors of Technology in Biotechnology of Jaypee University of Information Technology ,Solan has been carried out under my supervision .

Signature of Supervisor

Name of supervisor: Dr Abhishek Chaudhary
Designation: Associate Professor

Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology
Waknaghat, Solan(H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work presented in the project report titled " **Valorisation of citrus waste for the extraction and characterization of limonene**" in partial fulfillment of the requirements for the award of the degree of B.Tech in Biotechnology and submitted to the Department of Biotechnology And Bioinformatics, Jaypee University of Information Technology, Waknaghat is an authentic record of work carried out by **"Mr. CHAITANYA MOGHE (181819)"** during the period from August 2021 to May 2022 under the supervision of **Dr. ASHOK KUMAR NADDA**, Department of Biotechnology And Bioinformatics, Jaypee University of Information Technology, Waknaghat Solan Himachal Pradesh India.

CHAITANYA MOGHE

(181819)

To the best of my knowledge, the preceding statement is correct.

01.06.2022

Dr. ASHOK KUMAR NADDA

Assistant Professor

Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology, Waknaghat, Solan Himachal Pradesh, India.

Dated:

CERTIFICATE

This is to certify that work title **"Production of novel fungal phytase and it's applications"** by **Megha Tushir, Shubham Dogra and Abhinav Dharmani** during the end semester in June 2022 in fulfillment for the award of degree of Bachelor of Technology in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has been submitted partially or wholly to any other University or Institute for the award of any degree or appreciation.

.....

Signature of Supervisor

Dr. Saurabh Bansal

(Assistant Professor)

SUPERVISOR'S CERTIFICATE

This is to certify that the content of this project entitled "Brown gold, a low cost and sustainable alternative to develop paper pulp" by Ms. Ramneek Kaur Khurana is her research project work carried out under my supervision, of the Biotechnology and BioInformatics branch at Jaypee University of Information Technology, Solan, HP in the academic year 2021-22 for the fulfillment of the requirements of B. Tech Major Project. On the basis of the declaration made by her, I recommend this project report for evaluation.

Signature of the Supervisor

Name: Dr. Hemant Sood

Date: 25/05/2022

CERTIFICATE

This is to certify that the work titled "**ANTIBODY ENGINEERING THERAPEUTICS AGAINST TUBERCULOSIS: A REVIEW**", submitted by "**SHARVI SOOD (181822)**" in partial fulfilment for the award of the degree of B. Tech in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Dr. Rahul Shrivastava
Associate Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India - 173234

Date: 31/5/22

CERTIFICATE

This is to certify that the work entitled "**Cultivation and screening of microalgal strains for enhanced biomass production using enzymatic treatment**" pursued by Shagun Sharma (181823) and Kanishk Bhatt (181816) for the partial fulfilment of degree Bachelor of Technology in Biotechnology from Jaypee University of Information Technology, Waknaghat has been carried out under my supervision. This part of work has not been submitted partially or wholly to any other University or Institute for the award of any degree or appreciation.

01.06.2022

Dr. Ashok Kumar Nadda
Assistant Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology
Waknaghat, Solan-173234
Himachal Pradesh, India

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned with CamScanner

CERTIFICATE

This is to certify that the work titled "**Finding Gender-Specific Differences in Gene Expression of Active Tuberculosis Patients**", submitted by **Janki Insan (181824)** in partial fulfillment for the award of degree of B. Tech in Biotechnology at Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Dr. Rahul Shrivastava
Associate Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India - 173234

Date: 27-05-2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE OF ORIGINALITY

This is to certify that the thesis entitled: **"IMPORTANCE OF PHYSICOCHEMICAL PROPERTIES OF DRUGS"** submitted by **Pranjal Kalia** and **Manu Sharma** in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Biotechnology, Jaypee University of Information Technology, Solan has completed under the supervision and guidance of Dr. Poonam Sharma. This work has not been submitted to any other University or Institute for the award of this or any other degree or diploma.

.....

Dr, Poonam Sharma
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology
Waknaghat, Solan, H.P - 173234 India
Email: poonam.sharma@juit.ac.in

Date: 30/05/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned by TapScanner

SUPERVISOR'S CERTIFICATE

This is to certify that the work reported in the B. Tech. thesis entitled **"Enhancement of Anti-Diabetic Potential of *Chebulic myrobalan*"**, submitted by Manisha Sharma (181826) at Jaypee University of Information Technology, Waknaghat, India, is a bonafide record of their original work carried out under my supervision. This work has not been submitted elsewhere for any other degree or diploma.

01/06/2012

(Signature of Supervisor)

Dr. Garlapati Vijay Kumar

Associate Professor

Department of Biotechnology and Bioinformatics,

JUIT, HP-173234,India.

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work titled "**Studies on mycotoxins producing microorganism and Mucormycosis during COVID-19**", submitted by **"Ritika Shridhar(181827) & Mahima Singh Thakur(181828)"** in fulfilment for the award of the degree of B. Tech in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Dr. Jata Shankar
Associate Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India - 173234

21/6/2022

Date:

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work titled "**Studies on mycotoxins producing microorganism and Mucormycosis during COVID-19**", submitted by **"Ritika Shridhar(181827) & Mahima Singh Thakur(181828)"** in fulfilment for the award of the degree of B. Tech in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Dr. Jata Shankar
Associate Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology (JUIT)
Waknaghat, Solan, India - 173234

21/6/2022

Date:

IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work title **"A Study On Beta-Sitosterol Biosynthetic Pathways and it's Potential Application"** by **Yavan Pratap Singh** during the end semester in May 2022 in fulfillment for the award of degree of Bachelor of Technology in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of any degree or appreciation.

01/6/2022

Signature of Supervisor

Name of supervisor: Dr. Anil Kant

Designation: Associate Professor

Department of Biotechnology and Bioinformatics Jaypee University of Information Technology Waknaghat, Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work reported in the project report named is accurate. " To study the effect of drug, phytochemical & vitamins against Covid-19 main protease using in silico studies." in partial fulfillment of the requirements for a Bachelor of Technology in Biotechnology with a specialty in medical biotechnology and submitted to the Biotechnology Department at the Jaypee University of Information Technology, Waknaghat. It is genuine documentation as a part of B. Tech. Biotechnology project report by Priyanka Shukla (181831) from July 20, 2021, until May 20, 2022, under the supervision of, Dr. Jata Shankar, Associate Professor, Jaypee University of Information Technology, Waknaghat, Department of Biotechnology. To the best of my knowledge, the assertion mentioned above is correct.

Signature of supervisor

Dr. Jata Shankar Shankar 1/6/2022

Associate Professor

Department of Biotechnology

JUIT, Wakhnaghat

IQAC

Assistant Registrar (Academic Affairs)

CERTIFICATE OF ORIGINALITY

This is to certify that the thesis entitled: **"IMPORTANCE OF PHYSICOCHEMICAL PROPERTIES OF DRUGS"** submitted by **Pranjal Kalia** and **Manu Sharma** in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Biotechnology, Jaypee University of Information Technology, Solan has completed under the supervision and guidance of Dr. Poonam Sharma. This work has not been submitted to any other University or Institute for the award of this or any other degree or diploma.

.....

Dr, Poonam Sharma
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology
Waknaghat, Solan, H.P - 173234 India
Email: poonam.sharma@juit.ac.in

Date: 30/05/2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

Scanned by TapScanner

SUPERVISOR'S CERTIFICATE

This is to certify that the work reported in the B. Tech. thesis entitled **"Processing and Structuring the meat analogue by using plant-based derived composites"**, submitted by Astha Singh(181805) and Anirudh Joshi(181833) at Jaypee University of Information Technology, Waknaghat, India, is a bonafide record of their original work carried out under my supervision. This work has not been submitted elsewhere for any other degree or diploma.

G. Vijay Kumar 30/05/2022

(Signature of Supervisor)

Dr. Garlapati Vijay Kumar

Associate Professor

Department of Biotechnology and Bioinformatics

JUIT, HP-173234,India.

IQAC

SUPERVISOR'S CERTIFICATE

This is to certify that the work titled "Development of Anti-Acne Gel from Withania Somnifera" by Anushka Priya, Shubhangi Kumar, Srishti Roy during the 8th semester in Jan-May 2022 in fulfilment for the award of degree of Bachelors of Technology in Bio- technology from Jaypee University of Information Technology, Solan has been carried out under my supervision. This work can be sent totally or partially to any other university or college to obtain any degree or recognition.

30/5/22

Signature of Supervisor

Name of supervisor: Dr Udayabanu Malairaman

Designation: Associate Professor

Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology

Waknaghat, Solan (H.P.)

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that the major project work titled "**Green synthesis of silver nanoparticles from urtica dioica leaves**" by **Gunjanduring their 8th semester in May 2022in fulfillment for the project thesis in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has not been submitted partially to any other University or Institute for the award of any degree or appreciation.**

Signature of Supervisor

Dr. Abhishek Chaudhary

Assistant Professor (Grade – II)

Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology

Waknaghat, Distt-Solan, H.P. - 173234

E-mail –Abhishekcbt@gmail.com

Date: 30th May 2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that work contained in the report of "Phytochemical analysis of leaves extract of Celastrus paniculatus Wild prepared in various solvents" submitted to the Department of Biotechnology and Bioinformatics, Jaypee University of Information Technology, in the partial award of the degree of Bachelor of Technology in Biotechnology, is a record of bona fide work carried out by Mahak Rustagi, enrolment no. 181836, under my supervision. This work has not been submitted elsewhere for any other degree or diploma.

30/05/2022

Signature of Supervisor:

Name of Supervisor – Dr. Gopal Singh Bisht

Designation - Associate Professor

Department of Biotechnology and Bioinformatics

Jaypee University of Information Technology

Waknaghat, Dist.-Solan, H.P. - 173234

E-mail -gopal.singh@juit.ac.in

Date: 14th May 2022

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work reported in the Bachelor of Technology academic report entitled ***'Client Engagement & IP Services'*** submittedby **Nitika Kumari Gupta** in partial fulfillment for the award of degree of B.Tech. Biotechnology from **Jaypee University of Information & Technology, Waknaghat** has been carried out under mysupervision. This report was not submitted to any other University or Institute in full or in part for the award of any other degree, certificate or other titles.

Mr. Dhruva Sood

Dr. Gopal Singh
Bisht
Associate Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that the work reported in the Bachelor of Technology academic report entitled '***Spatial Genomics, Transcriptomics and Proteomics Solutions; Global Market Report***' submittedby **Nishta Garg** in partial fulfillment for the award of degree of B.Tech. Biotechnology from **Jaypee University of Information & Technology, Waknaghat** has been carried out under mysupervision. This report was not submitted to any other University or Institute in full or in part for the award of any other degree, certificate or other titles.

Jasparam Kaur
Self Attested

Ms. Jasparam Kaur
Senior Business Analyst
RootsAnalysis Pvt. Ltd.
Date: May 14, 2022

30/05/2022

Dr. Gopal Singh Bisht
Associate Professor
Department of Biotechnology and Bioinformatics
Jaypee University of Information Technology

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

CERTIFICATE

This is to certify that work title "**Production of novel fungal phytase and it's applications**" by **Megha Tushir, Shubham Dogra and Abhinav Dharmani** during the end semester in June 2022 in fulfillment for the award of degree of Bachelor of Technology in Biotechnology of Jaypee University of Information Technology, Solan has been carried out under my supervision. This work has been submitted partially or wholly to any other University or Institute for the award of any degree or appreciation.

.....

Signature of Supervisor

Dr. Saurabh Bansal

(Assistant Professor)

CERTIFICATE

This is to certify that the work titled "Study on lactamase and lactamase inhibitors" submitted "Ms. Reetika Aggarwal" in partial fulfilment for the award of the degree of Btech. Biotechnology of Jaypee University of Information Technology, Waknaghat has been out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Signature of Supervisor ..... Reetika Aggarwal (181841)

Name of Supervisor Dr. JitendraaVashishtt

Designation Associate Professor

Date 19th May 2022

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY • WAKNAGHAT • IQAC

Assistant Registrar (Academics)
Jaypee University of Information Technology
Waknaghat, Distt. Solan (H.P.)

SUPERVISOR'S CERTIFICATE

This is to certify that the work titled "Phytochemical analysis of two valuable traditional underutilized plants of Himachal Pradesh" by Divyam during their 8th semester (January- May 2022) in fulfilment for the Major Project has been carried out under my supervision.

Signature of Supervisor:

Name of Supervisor – Dr. Hemant Sood

Designation - Associate Professor

Department of Biotechnology and Bioinformatics
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Waknaghat, Dist.-Solan, H.P. - 173234

E-mail -hemant.sood@juit.ac.in

Date: 14th May 2022