JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT, SOLAN

1.3.4
(Percentage of Students undertaking Field Projects/ Internships)

The Sequence of Proofs is as follows:

Field Projects/ Internships

Department of
Computer Science & Engineering and Information Technology

2020

Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**ONLINE LEARNING APP FOR LIDO LEARNING USING REACT-NATIVE**" 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 2020 to May 2020 under the supervision of   **Mr. Jivitesh Bansal** (Vice President- Engineering in Lido Learning).

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

Rohit Garg,161203

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

Mr. Jivitesh Bansal   Dr. Vivek Kumar Sehgal

(Vice President - Engineering)   Associate Professor (CSE&IT)

Lido Learning   Jaypee University Of Information Technology

Dated: 24-07-2020
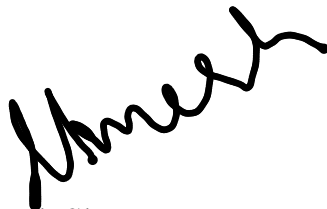
CERTIFICATE

Candidate Declaration

I declare that the work presented in this report 'Full Stack Web Development' 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 and Engineering/ Information Technology, Jaypee University of Information Technology Waknaghat, is an authentic record of my work carried out over a period of Feb,2020 to May,2020 under the Supervision of Umesh Sharma (Product Manager, magicPin).

The matter embodied in the report has not been submitted for the award of any other degree or diploma. It contains sufficient information to describe the various tasks performed by me during the internship.

Charchit Kapoor, 161207

This is to certify that the above statement made by the candidate is true to the best of my knowledge. The report has been reviewed by the company officials, and has been audited according to the company guidelines.

Umesh Sharma

Product Manager

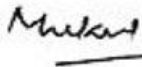magicPin (Samast Technologies Private Ltd.)

Dated: May 29th, 2020
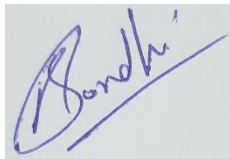
Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled **E-Commerce web application using angular(2+)** in fulfilment of the requirement 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, Waknaghat is an authentic record of our own work carried out over a period from February 2020 to May 2020 under the supervision of Mr. Bobin Sondhi.

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

Mukul Garg 161209

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

Mr. Bobin Sondhi

Dated: 24-05-2020

Certificate

I hereby declare that the work presented in this report entitled "**Monitoring and Deployment in Cloud Infrastructure**" in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science & 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 2020 to May 2020 under the supervision of **Mr. Anoop Kumar (**Manager, Cloud Operations).

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

Abhishek Jain

Abhishek Jain (161212)

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

Anoop Kumar

Mr. Anoop Kumar
Manager, Cloud Operations
Dated: 23rd May, 2020

Certificate

I hereby declare that the work presented in this report entitled **"Sentiment Analysis of COVID-19 "** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science & 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 May 2020 to June 2020 under the supervision of **Dr. Mrityunjay Singh.**
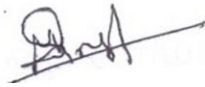
The matter embodied in the report has not been appeased for the award of any other degree or diploma.

Rahul Rana

161214

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

………………………….

Dr. Mrityunjay Singh

Assistant Professor (SG)

Department of Computer Science & Engineering and Information Technology
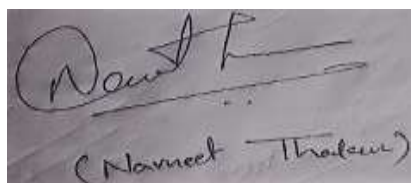
Jaypee University of Information Technology

Dated: June 23, 2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Hostel Hero: An AIML Chatbot"** 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 July 2019 to May 2020 under the supervision of **Dr. Hemraj Saini** (Associate Professor, Computer Science &Engineering Department).

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

Navneet Thakur (161215)

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

Dr. Hemraj Saini
Associate Professor
Computer Science and Engineering and Information Technology
Dated: 20th June 2020

CANDIDATE DECLARATION

I hereby declare that the work presented in this report entitled PERL SCRIPTING, AUTOMATION, LINUX AND MANUAL TESTING 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 our own work carried out over a period from February 2020 to May 2020 under the supervision of Dr. Shivam Dhingra, Senior Software Engineer (QA). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Ishita Jain, 161221

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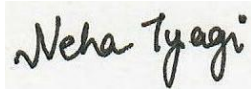
Mr. Shivam Dhingra

Senior Software Engineer (QA)

shivam dhingra

Dated: 25/05/2020
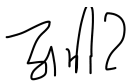
CANDIDATE'S DECLARATION

I Neha Tyagi, hereby declare that the work completed during the Internship program at Cognizant Technology Solution Pvt. Ltd. in fulfilment of the requirements for the degree of Bachelor of Technology in Computer Science and Engineering/Information Technology, Jaypee University of Information Technology, Waknaghat is an attested record carried over a period from February 2020 to June 2020 under the supervision of coach Praveen Parameswaran .

Neha Tyagi

Neha Tyagi

161229

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

25/7/2020

Amit Kumar

Assistant Professor (Senior Grade)

Department of CSE

Dated: 5th June 2020

Certificate

I hereby declare that the work presented in this report entitled **"Driver Sleep Alert System"** 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 May 20 to June 2020 under the supervision of **Dr. Pardeep Kumar. (Associate Professor, SM-ACM)**

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

vinamra jain

....

(Student Signature)

Vinamra Jain

(161233)

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

....

Dr. Pardeep Kumar

Associate Professor, SM-ACM

Department of Computer Science and Engineering and Information Technology

Dated: ....24/06/2020.....

Certificate

We hereby declare that the work presented in this report entitled **"Building Platform Recruiting App in Salesforce"** in fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science & 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 February 2020 to May 2020 under the supervision of **Dr. Mrityunjay Singh.**

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

Tapasya

.----------------------------------

Tapasya Sangrai

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

…………………….

Dr. Mrityunjay Singh

Assistant Professor

Department of Computer Science & Engineering and Information Technology

Jaypee University of Information Technology

Dated: June 23, 2020

CERTIFICATE

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"WebChat App"** 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 May 2020 to June 2020 under the supervision of Dr. Hari Singh **,** 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.

Aryan Pal Singh
Roll No - 161236

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

Dr. Hari Singh
Assistant Professor (SG)
Department of Computer Science
& Engineering and IT
Dated:

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Cloud Monitoring & Deployment"** 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 Feburary 2020 to May 2020 under the supervision of **Mr. Anoop Kumar** (Manager, Cloud Operations, Zscaler(India).

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

Abhishek Katoch (161237)

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

Anoop Kumar

Name: Mr. Anoop Kumar

Designation: Manager

Department Name: Cloud Operations

Dated: 25th May, 2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **Virtual Personal Assistant using Natural Language Processing and 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 2015 to December 2015 under the supervision of **Dr. Amol Vasudeva** (Assistant Professor, 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)

Faiz Ali, 161252

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

(Supervisor Signature)

Dr. Amol Vasudeva

Assistant Professor

Department of Computer Science & Engineering

02/12/2019

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 **"User 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 23, May 2020 to 22, June 2020 under the supervision of Dr. Hari Singh **,** 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.

Sahil Kaith
Roll No - 161247

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

Dr. Hari Singh
Assistant Professor (SG)
Department of Computer Science
& Engineering and IT
Dated:

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Premier League Match Result 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 January 2020 to June 2020 under the supervision of **Dr Jagpreet Sidhu** (Assistant Professor , 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.

Vrinda Choudhary, 161248

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 & Engineering and Information Technology
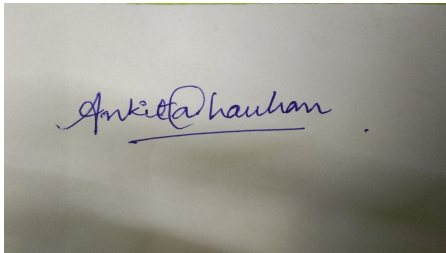
Dated: May 23,2020
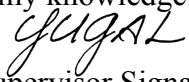
Certificate

Candidate's Declaration

I hereby declare that the work presented in this report entitled " ………SPAM FITERATION USING NLP……." 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 2020 to June 2020 under the supervision of Dr. Yugal Kumar professor of Computer Science Department.

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

Ankita Chauhan (161254).

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

15/07/2020

(Supervisor Signature)
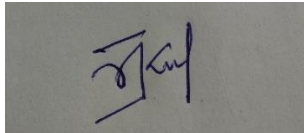
Dr .Yugal Kumar

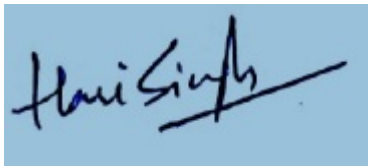Computer Science Department

Dated:

CERTIFICATE

Candidate's Declaration

I hereby declare that this submission is our 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 where due acknowledgment has been made in the text.

Mukul Sharma(161256)

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

Dr Hari Singh
Assistant Professor (SG)

Candidate's Declaration

I hereby declare that the work presented in this report entitled **Web Application Security Assessment Scanning** 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 2020 to May 2020 under the supervision of **Mr. Anand Prakash,** CEO & Founder Appsecure Inc.

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

Sandeep Hodkasia, 161260

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

Anand Prakash
Digitally signed by Anand Prakash
Date: 2020.06.05 13:06:04 +05'30'

Anand Prakash

CEO & Founder

Appsecure Inc., Bangalore

Candidate's Declaration

I hereby declare that the work presented in this report entitled **" ECommerce Website – Angular "** 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 2020 to May 2020 under the supervision of **Mr. Bobin Sondhi**.
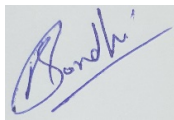
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)

Ishan Gupta, (161261)

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

(Supervisor Signature)

Mr. Bobin Sondhi

Dated: 26/05/2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Image Captioning using Intelligent Datasets"** 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 May 2020 to June 2020 under the supervision of **Mr. Rizwan ur Rehman.**

The work done embodied in the report has not been appeased for the award of any other degree or diploma.

Aditya Mohan

161262

This is to certify that the above affirmation made by the candidate is true to the best of myknowledge.

Mr. Rizwan ur Rehman
Assistant Professor (Grade- II)
Department of Computer Science & Engineering and Information Technology

Dated: 22nd Jun 2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"COVID19 DATA APP USING JAVA"** 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 2020 to July 2020 under the supervision of **Dr. Pradeep Kumar Singh** (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)

Aditya Jain,161265

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

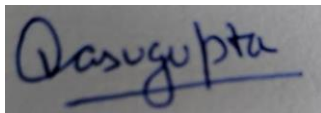(Supervisor Signature)

Dr. Pradeep Kumar Singh

Associate Professor

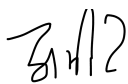Computer Science and Engineering/Information Technology

Dated:

CERTIFICATE

I hereby declare that the work presented in this report entitled "Event Management System" in fulfilments 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 under the supervision of Dr. Amit Kumar Jakhar . The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vasu Gupta

161266

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

25/7/2020

Dr. Amit Kumar Jakhar

Assistant Professor (SG)

Department of Computer Science and Engineering
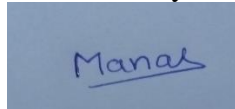
Jaypee University of Information Technology

Dated: May, 2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Event Registration App"** 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 authentic record of our own work carried out over a period from February 2020 to May 2020 under the supervision of Mr.Shibu kalidhasan and guidance of **Mr.Praveen Modi**(Assistant Professor grade-1), Computer Science and Engineering and information technology.
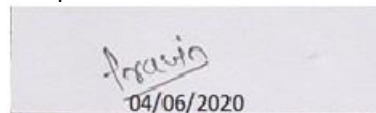
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Manas Dubey,161267

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   and   Engineering

04/06/2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Management App in Salesforce"** 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 2020 to May 2020 under the supervision of **Sibhu Kalidhasan,** Practice Lead – Salesforce , Cognizant India

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

Shiva Chandel (161272)
Department of Computer Science, JUIT, Waknaghat, India

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

Sibhu Kalidhasan
Practice Lead Salesforce
Cognizant (India)
Date: May,2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Cloud Upgrade Automation"** 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 Febuary 2020 to May 2020 under the supervision of **Mr. Anoop Kumar**(Manager, Cloud Operations).

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

Nishchal Kumar Garg (161275)

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

Mr. Anoop Kumar
Manager, Cloud Operations
Dated: 23rd May, 2020

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled   iOS APP
DEVELOPMENT submitted **at Jaypee University of Information Technology, Waknaghat** ,
India is an authentic record of our work carried out under the supervision of **Dr. Pardeep Kumar**
We have not submitted this work elsewhere for any other degree or diploma.

Ketan batra

Signature of the Student

Ketan Batra
161277

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

Pardeep Kumar.

Signature of the Supervisor
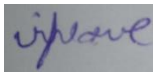
Dr. Pardeep Kumar

Date:

Candidate's Declaration

I hereby declare that the work shown in this report entitled "Community with Knowledge and Chat" in partial fulfillment of the requirements for the degree of Bachelors 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 a valid and authentic record of our own work carried out over a duration from Feburary 2020 to May 2020 under the supervision Dr. Rajinder Sandhu, Assistant Professor.

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

Viplove Sharma, 161291

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

Dr. Rajinder Sandhu

Assistant Professor (Senior Grade)

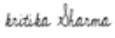Department of Computer Science & Engineering and Information Technology

Dated:

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Chatroom using .NET Framework"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science &Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat, Solan is an original record of work of my own carried out between a period From June 2020 - July 2020 under the guidance of

Dr. Aman Sharma (Assistant Professor, Department of CSE & IT).

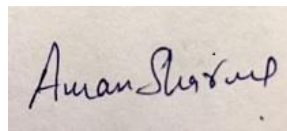The matter incorporated in the report has not been submitted for the reception of any other degree or diploma.

(Student
Signature)
Kritika Sharma
(161294)
This is to certify that the above declaration made by the candidate is true to the best of my knowledge.

(Supervisor Signature) Dr. Aman Sharma
Assistant Professor Department of Computer
Science& Engineering

Dated: ..../July/2020

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **"PATENT INFRINGEMENT ANALYSIS"** submitted at **Jaypee University of Information Technology, Waknaghat**, India is an authentic record of my work carried out under the supervision of Dr. Pardeep Kumar. I have not submitted this work elsewhere for any other degree or diploma.

Hritik Negi

161295

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

Dr. Pardeep Kumar

CANDIDATE'S DECLARATION

This is to certify that the work which is being presented in the report entitled "**Dockerizing Jenkins and One click Deployment with CI/CD Pipeline**" in partial fulfilment of the requirements for the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science and Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of my own work carried out over a period from February 2020 to July 2020 under the supervision of Dr. Ravindara Bhatt (Associate Professor, Senior Grade, Computer Science & Engineering Department) and Akash Hudge (Solution Delivery Consultant, ZS Associates, Pune).The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)

Rohit Garg, 161297

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

RAVINDARA BHATT

(Supervisor Signature)   (Supervisor Signature)

Dr. Ravindara Bhatt   **Akash Hudge**

Associate Professor (Senior Grade)   **Solution Delivery Consultant**

Department of Computer Science & Engineering   **ZS Associates Pvt. Ltd.**

Pune, Maharashtra

India, 411014

Dated:

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Essay Tone Detector"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science &Engineering** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat, Solan is an authentic record of my own work carried out over a period From May 2020 to June 2020 under the supervision of **Dr. Rajni Mohana**(Associate Professor, Department of CSE & IT).
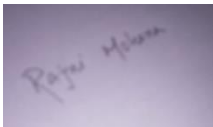
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)

Shivam Garg, 161298

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

(Supervisor Signature) Dr. Rajni Mohana Associate Professor Department
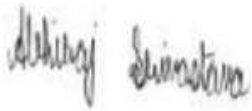of Computer Science& Engineering

Dated 23/June/2020
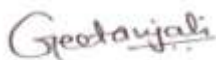
CERTIFICATE

Candidate's Declaration

I hereby declare that the work shown in this report entitled "**Margin Of Negotiation Calculator**" in partial fulfillment of the requirements for the degree of **Bachelors 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 a valid and authentic record of our own work carried out over a duration from Feburary 2020 to May 2020 under the supervision **Dr.Geetanjali Rathee**(Assistant Professor, Senior Grade, Computer Science & Engineering Department).

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

Abhiraj Srivastava (161299)

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

Dr. Geetanjali Rathee
Assistant Professor (Senior Grade)
Department of Computer Science

Date

DECLARATION

I hereby declare that the work reported in this report **"SECURING SALESFORCE DATA"** 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 and Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of my own work carried out over a period from Feb 2020 to May 2020 under the supervision of **Dr. Pardeep Kumar (AssociateProfessor - Dept. of CSE and IT)** and **Mr. Shibu Kalidhasan (Salesforce trainer at Cognizant Technology Solutions Ltd.)**

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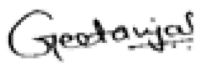
degree or diploma.

Anshul Sharma

(161303)

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

SUPERVISOR'S CERTIFICATE

This is to certify that the work reported in BTech. Industrial Training entitled **"Android Event Analytics"** submitted by **Akshit Gupta** at **Jaypee University of Information Technology, Waknaghat, India** is a bonafide record of his original work carried under my supervision. This work has not been submitted elsewhere for any other degree or diploma.

Vihaan Verma

Geetanjali

Dr. Geetanjali Rathee   Mr. Vihaan Verma

Assistant Professor (SG)   Android Team Lead

Department of Computer Science   Testbook, Navi Mumbai, India

Jaypee University of Information Technology

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**Process Automation in Salesforce**" 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 7th February 2020 to 10th May 2020 under the supervision of**Dr.Pardeep Kumar (Associate Professor, SM-ACM-Department of Computer Science & Engineering and InformationTechnology-JUIT**)and**Mr. ShibuKalidhasan (Salesforce trainer at Cognizant Technology Solutions ltd.)**.
 The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Aditi Manglesh, 161305

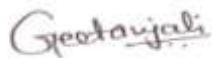This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Dr. Pardeep Kumar

Associate Professor, SM-ACM

Department of Computer Science & Engineering and Information Technology Dated:

SUPERVISOR'S CERTIFICATE

This is to certify that the work reported in BTech. Industrial Training entitled **"Adobe Experience Manager (Enterprise Content Management System)"** submitted by **Munish Thakur** at **Jaypee University of Information Technology, Waknaghat, India** is a bonafide record of his original work carried under my supervision.

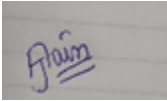This work has not been submitted elsewhere for any other degree or diploma.

Dr. Geetanjali Rathee

Assistant Professor (SG)

Department of Computer Science

Jaypee University of Information Technology

May, 2020

Mr. Pankaj Bansal

Managing Partner

ArgilDX , Noida, India

DECLARATION
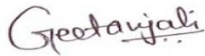
We hereby declare that the work reported in the B.Tech Project Report entitled IOS APP DEVELOPMENTsubmitted **at Jaypee University of Information Technology, Waknaghat**, India is an authentic record of our work carried out under the supervision of **Dr. Geetanjali** We have not submitted this work elsewhere for any other degree or diploma

Signature of the Student

Arpit Jain
161314

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

Signature of the Supervisor

Dr. Geetanjali

Date:

Head of the Department /Project Coordinator

CERTIFICATE

This is to certify that the work reported in this report entitled **"Data Analytics using Vena and QlikView for Quarter Processes"** submitted by Harshit Chrangoo at Jaypee University of Information Technology, Waknaghat is a bonafide record of his original work carried out under my supervision.

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

Geet thukral

Geet Thukral
Sr. Specialist, Corporate Actuarial
AXA XL, a division of AXA

Candidate's Declaration

I hereby declare that the work presented in this report entitled **" Token Generator"** 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 May 2020 to June 2020 under the supervision of **Surjeet Singh** Computer Science Department.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.
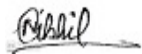
Shubham Gupta, 161322.

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

Supervisor Name: Mr. Surjeet Singh
Designation: Assistant Professor (Grade-I)
Department name: CSE&IT
Dated:

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Community with Knowledge and Chat"** 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, Solan is an authentic record of our own work carried out over a period from February 2019 to May 2019 under the supervision of Dr. Monika Bharti (Professor, Department of CSE & IT).

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

Nikhil Jangra,

161323

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

Supervisor Name: Dr. Monika Bharti

Designation: Assistant Professor (Grade-II)

Department Name: Department of Computer Science Engineering & Information Technology

Dated ..... /May/2020

Candidate's Declaration

I thus pronounce that the work introduced in this report entitled "**Phrase Emotion Detector**" in partial fulfillment of the necessities for the honor of   the level of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the branch of **Computer Science and Engineering and Information Technology, Jaypee University of Information Technology Waknaghat** is our very own valid record work completed over a period from May 2020 to June 2020 under the oversight of **Dr. Jagpreet Sidhu** (Assistant Professor (Senior Grade) Department of Computer Science and Engineering and InformationTechnology -JUIT) .

The matter exemplified in the report has not been submitted for the honor of some other degree or confirmation .

Aayushman Saraswat, 161324

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 (Senior Grade)

Department of Computer Science & Engineering

Dated :

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Recruitment Application Development on Salesforce.com (SFDC)"** 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 August 2018 to May 2019 under the supervision of **Mr. Shibu Kalidashan (SFDC Trainer at Cognizant, Associate Manager - Accenture).**

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

Mayank Fulera,

161327

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

Mr. Shibu Kalidashan
SFDC Trainer at Cognizant &
Associate Manager - Accenture

Dated: 26th May, 2020

Candidate's Declaration

I hereby declare that this submission is my own work carried out at Octro Inc. from 3rd Feb 2020 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 where due acknowledgment has been made in the text.

Satyam Aggarwal, 161330

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

Mr. Muneesh Garg
Director of Engineering,
Octro, Inc.

Dated: 04-06-2020

CERTIFICATE

I hereby declare that the work presented in this report entitled "Recruiting Application Developed on Salesforce" 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 7th February 2020 to 10th May 2020 under the supervision of **Dr. Pardeep Kumar (Associate Professor, SM-ACM) and**
Mr. Shibu Kalidhasan (Salesforce trainer at Cognizant Technology Solutions ltd.).
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Varun Saxena (161332)

This is to certify that the above statement made by the candidates is true to the best

of my knowledge.

Dr. Pardeep Kumar (Associate Professor, SM-ACM)

Mr. Shibu Kalidhasan (Salesforce trainer at Cognizant Technology Solutions ltd.)
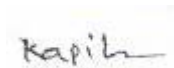
DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled IOS APPLICATION DEVELOPMENTsubmitted **at Jaypee University of Information Technology, Waknaghat** , India is an authentic record of my work carried out under the supervision of **Dr. Kapil Sharma** I have not submitted this work elsewhere for any other degree or diploma.

Signature of the Student

Garvit Gupta
161333

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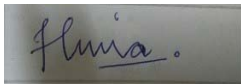

Signature of the Supervisor

Dr. Kapil Sharma

Date:

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled **"Fault tolerance IoT"** in partial fulfillment of the requirement 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 2020 to June 2020 under the supervision of **Mr. Arvind Kumar (**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.

(Student Signature)

Hima K S

161338

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

(Supervisor Signature)

Arvind Kumar

Assistant Professor Grade-II

Department of Computer Science & Engineering and Information Technology

CANDIDATE DECLARATION

I hereby declare that the work presented in the report 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 genuine record of our own work carried out over a period from February 2020 to May 2020 under the supervision of Mr. Saurabh Gupta, Senior Software Engineer (QA).

Ankit Gera , 161342

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

Saurabh Gupta

Mr. Saurabh Gupta
Senior Software Engineer (QA)

Dated: 22/06/2020

CERTIFICATE

This is to certify that the work titled "TDI – Trusted Digital Identity" submitted by "Shivam Tyagi" of B. Tech of Jaypee University of Information Technology University, Solan, Himachal Pradesh 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 other degree or diploma.

Signature of Supervisor

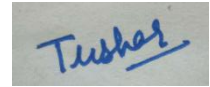Name of Supervisor   Mr. Gaurav Singh

Designation   Senior Project Lead (TDI)

Date   25-May-2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**Real-Time Face Recognition"** 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 2019 to December 2019 under the supervision of **Dr. Vivek Sehgal**, Associate Professor (Senior Grade), 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**.**

Tushar Gautam
(161350)

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

Dr. Vivek Sehgal
Associate Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology
Dated: -

Candidate's Declaration

I hereby declare that the work presented in this report entitled **Movie 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 May 2020 to June 2020 under the supervision of **Dr. Vivek Sehgal** (Associate Professor, Computer Science).

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

Rashi Gupta, 161351

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

Dr. Vivek Sehgal

(Associate Professor)

(Department of Computer Science & Engineering and Information Technology)

Dated:

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled **"Weather App using Android Studio"** 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 **(Dr. Pradeep Kumar Gupta)** (Associate Professor Department of Computer Science and Engineering and Information Technology).
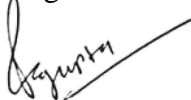
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)

Bhavna Verma, 161353

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

(Supervisor Signature)

Dr Pradeep Kumar Gupta

Associate Professor

Department of Computer Science and Engineering and Information Technology

Dated:

Candidate's Declaration

I hereby declare that the work presented in this report entitled "**Suggestion Box Application**" 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 7th February 2020 to 10th   May 2020 under the supervision of **Dr. Rajni Mohana** (Associate Professor (Senior Grade)-Department of **Computer Science & Engineering and InformationTechnology -JUIT**) and **Mr. Shibu Kalidhasan (Salesforce trainer at Cognizant Technology Solutions ltd.).**
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Arpit Dogra, 161355

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

Dr. Rajni Mohana
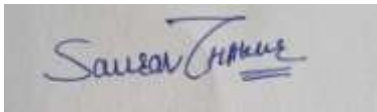Associate Professor (Senior Grade)
Department of Computer Science & Engineering and Information Technology
Dated:26/06/2020
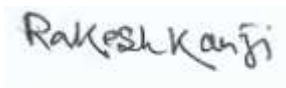
CANDIDATE DECLARATION

I hereby declare that the work presented in this report entitled **"Salesforce Application for Recruiting"** in fulfilment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science & 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 7th February 2020 to 5th June 2019 under the supervision of **Dr. Rakesh Kanji.**

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

Saurav Thakur

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

Dr. Rakesh Kanji

Assistant Professor

Department of Computer Science & Engineering and Information Technology

Jaypee University of Information Technology
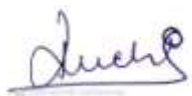
Dated: …23/6/2020……………….

DECLARATION

I hereby declare that the work presented in this report entitled "Developing a 2D Game In Java" 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 24 February 2020 to 20 March 2020 under the supervision of Dr. Ruchi Verma(Assistant Professor, Senior Grade, Computer Science & Technology and Information Technology). The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Vanshika Chauhan

161383

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

(Supervisor Signature)
Dr. Ruchi Verma
Assistant Professor (Senior Grade)
Computer Science & Engineering and Information Technology
Dated:

DECLARATION

I hereby declare that the work reported in this report **"Cloud Based Solution to CRM (Salesforce)"** 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 and Engineering, Jaypee University of Information Technology, Waknaghat, is an authentic record of my own work carried out over a period from Feb 2020 to May 2020 under the supervision of Mr. Shibhu Kalidhasan (Principal Functional Analyst, Cognizant Technology Solution).
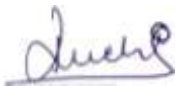
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Riya Singh

(161386)

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

(Supervisor Signature)

Dr. Ruchi Verma

Assistant Professor (Senior Grade)

Computer Science & Engineering

DECLARATION

I hereby declare that the work presented in this report entitled "RAN Evolution and Automation" 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 3rd February 2020 to 20 March 2020 under the supervision of **(Jitendra Singh – CA 2nd Level Manager)at Ericsson Global pvt ltd, Noida.**
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Muskan kaushal
161390

This is to certify that above made statement is true to my knowledge.

 Mr. Surjeet Singh
Assistant Professor
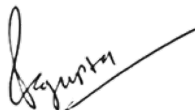Computer Science and Engineering

CANDIDATE'S DECLARATION

This is to certify that the work which is being presented in the report entitled "**Modelling & Automating Business Process for a Recruiting App**" in partial fulfilment of the requirements for the degree of **Bachelor of Technology** in **Computer Science and Engineering** submitted in the department of Computer Science and Engineering, Jaypee University of Information Technology Waknaghat is an authentic record of our own work carried out over a period from March 2020 to June 2020 under the supervision of **Dr. Pradeep Kumar Gupta** (Associate Professor, Senior Grade, Computer Science & Engineering Department).The matter embodied in the report has not been submitted for the award of any other degree.

Srishti Gupta, 161453

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

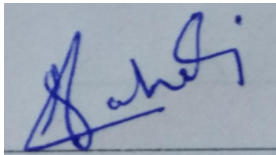(Supervisor Signature)

Dr. Pradeep Kumar Gupta

Associate Professor (Senior Grade)

Department of Computer Science & Engineering
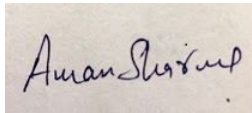
Dated: 2nd June 2020

STUDENT DECLARATION

I, Sajal Lahoti, hereby declare that the presented report of internship titled "Internship Report at Paxcom India Pvt Ltd" is uniquely prepared by me after the completion of 12 weeks work at Gurugram Office of Paxcom India pvt Ltd. I also confirm that the report is only prepared for my academic requirement, not for any other purpose. It might not be used with the interest of the opposite party of the corporation.
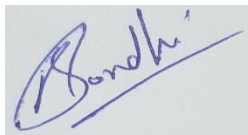
(Student Signature)
Sajal Lahoti, 161461

This is to certify that the above statement made by the candidate is true to the best of my knowledge.
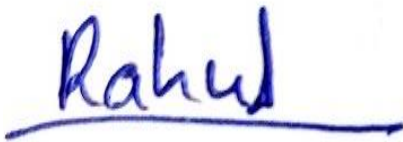
(Project Guide)
Dr Aman Sharma

(Supervisor Signature)
Mr Bobin Sondhi
Paxcom India

CANDIDATE'S DECLARATION

I hereby declare that the work presented in this report entitled **"Student Suvidha – A React Native Application"** in partial fulfillment of the requirement for the award of the degree of **Bachelor of Technology** in **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 2020 to June 2020 under the supervision of **Dr. Aman Sharma (**Assistant Professor (Grade-II) Department of Computer Science & Engineering and Information Technology).

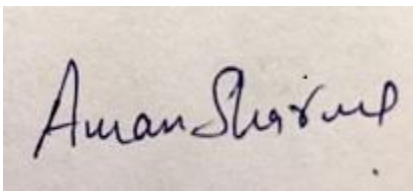The matter embodied in the report has not been submitted for the award of any other degree or diploma.

(Student Signature)

Rahul Gupta

161465

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

(Supervisor Signature)

Aman Sharma

Assistant Professor Grade-II

Department of Computer Science & Engineering and Information Technology

DECLARATION

I hereby declare that the work presented in this report entitled **"2nd L.A. 4G Radio Access Network (RAN) Domain"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **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 3rd February 2020 to 18th march 2020 under the supervision of **Rizwan Ur Rehman**(Assistant Professor, Computer Science& Engineering and Information Technology) and **Akash Jaiswal** Senior Engineer at Ericsson Global India Ltd.

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

Sachin Gupta (161467)

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

Rizwan Ur Rehman

Assistant Professor

Department of Computer Science & Engineering and Information Technology,

Jaypee University of Information Technology

Dated: 25th May 2020

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **Student Report** submitted at **Jaypee University of Information Technology, Waknaghat , India** is an authentic record of my work carried out under the supervision of **Mrs. Monika Bharti Jindal .** I have not submitted this work elsewhere for any other degree or diploma.

UDISHA PANDEY
161469

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

Mrs. Monika Bharti Jindal
Associate Professor
Dept of Computer Science & Information Technology
Jaypee University Of Information Technology
Waknaghat, Distt. Solan,
Himachal Pradesh

Date:22 June, 2020

Candidate's Declaration

I hereby declare that the work presented in this report entitled **" Further Analysis of Accident 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 May 2020 to June 2020 under the supervision of **Dr. Rakesh Kanji ,** 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.

(Student Signature)
Prattyush Shanker Sinha, 161471.

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

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

Candidate's Declaration

I hereby declare that the work presented in this report entitled **" 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 Waknaghat is an authentic record of my own work carried out over a period from May 2020 to June 2020 under the supervision of **Dr. Ruchi Verma** .

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

Amritanshu

(Signature)

Amritanshu Singh 161474

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

Dr.Ruchi Verma

Computer Science and Information Technology

Dated:

Candidate's Declaration

We hereby declare that the work presented in this report entitled **"Balance API Creation on AWS"** in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Information Technology** submitted in the department of Computer Science and 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 2020 to May 2020 under the supervision of **(Rizwan Ur Rehman)** (Assistant Professor, 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.

Ayush Patel (161478)

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

Rizwan Ur Rehman.   Gaurav Foujdar

Assistant Professor   Mentor

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

Dated: 25/05/2020

Declaration

I hereby declare that the work presented in this report entitled "Loan Approval Predictor" 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 2020 to June 2020 under the supervision of Dr. Aman Sharma (Assistant Professor(Grade-II), Computer Science & Engineering and Information Technology).
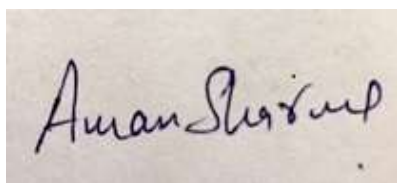
The matter embodied in the report has not been submitted for the award of any other degree or diploma.

Shail Vatsal Vashist

161480

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)

Computer Science & Engineering and Information Technology

Dated:

Field Projects/ Internships

Department of
Electronics and Communication
Engineering

2020

ACKNOWLEDGEMENT

I take this opportunity to express my sincere gratitude to the Prof. M. J. Nigam (HoD), Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Solan for providing this opportunity to carry out the present work.

The constant guidance and consolation got from **Dr Shruti Jain** Associate Professor Department of Electronics and Communication Engineering has been of incredible assistance in conveying our present work and helped us in finishing this task with success.

I would like to express a deep sense of gratitude to my trainers **Mrs. Dipti Anjelakar** (SQL), **Mr. Krishanu Mukherjee** (JAVA), **Mr. Prabhat Chandra** (Python), at Cognizant Technology Solutions for their guidance and support in defining the design problem and towards the completion of my work. Without their wise counsel and able guidance, it would have been impossible to complete the thesis in this manner.

I am also thankful to our batch owners my batch owner **Mrs. Manoprincy J,** for her intellectual support throughout the course of this work.

Finally, I thank my parents and my family members for giving the moral support and abundant blessings in all of activities and my dear friends who helped me to endure the difficult times with their unfailing support and warm wishes.

DECLARATION

I by this meansacknowledgethat the work narrated in this report named as "**AUTOMATION AND ANALYSIS IN TELECOMNETWORKS**" in partial gratification of the requirements for the endowment of the degree of **Bachelor of Technology** in **Electronics and Communication Engineering**appeased in the department of Electronics and Communication Engineering, Jaypee University of Information Technology Waknaghat is an originaltranscription of my endemic work accomplish over a duration from date 3 Feb 2020 to May 2020 under the administration of (**Neeraj Bhatnagar**) (Senior Manager-SDU Bharti BMAS SA MNS SLOP SDU BH Tools & Auto) and (**Dinesh Kumar**) (Program Manager BMAS SA MSN SLOP SDU BH PMgmt).The issue epitomized in the report has not been submitted for the honor of some other degree or confirmation.

Himanshi Sharma

This is to affirm that the above proclamation made by the competitor is consistent with the best of my insight.

ERICSSON

Neeraj Bhatnagar N

Senior Manager
SDU Bharti-BMAS SA MNS SLOP SDU BH Tools & Auto
Mobile:+917838290356
Neeraj.n.bhatnagar@ericsson.com

CERTIFICATE

This is to certify that the work which is being presented within this project report titled **"Pick Productivity Improvement, DEA Miss and Pick Short Reduction"** for partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Electronics and Communication Engineering and submitted to the department of Electronics and Communication Engineering, Jaypee University of Information Technology, Waknaghat is an authentic record of work administered by **Priyanshi Rastogi** (161016) during a period of February 2020 – May 2020 under the supervision of **Prashant Parihar** (Operation Manager), Amazon Seller Services Private Limited, India.

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

Prashant Parihar

Operations Manager

Amazon Seller Services Private Limited, India

Date – 24 May 2020

ACKNOWLEDGEMENT

I am grateful to the authorities of LIDO LEARNING(quality tutorials), Noida for having me to go ahead with the organisation and work on the model of sales and marketing in partial fulfilment of Bachelor of Technology (Electronics and Communication Engineering)degree syllabus of Jaypee University of Information Technology.

I take this opportunity to express my sincere gratitude towards Mr. Gaurav Das and Mr. Arya, training managers, lido learning, for training me and helping me throughout my internship period at lido.

I am extremely grateful to Mr. Shubham Sharma, Mr. Harjeet Singh (Manager) for their time to time guidance and help extended during each stage of our model.

Further I would like to thank Mr. Alok Singh and Mr. jatin Goel for their kind help extended during the entire period of my internship and for their time to time guidance and help extended during each stage of our internship. Finally, I would like to thank each and every member of LIDO LEARNING for making me feel comfortable and helping me in every possible manner.

Date: 23rd may, 2020

 Thank You,
KESHAV KALRA
161019

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **" NETWORKING AUTOMATION UNIX and SCRIPTING"** is for the fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Electronics and Communication Engineering** submitted to the Department of Electronics & Communication Engineering**, Jaypee University of Information Technology Waknaghat** is an honest representation of the record of my work carried for a period from February 2020 to May 2020 under the supervision of **Mr. Shivam Dhingra** (Software Engineer-QA). This report has not been submitted anywhere else for any other degree or diploma.

Manasvi

MANASVI KASHYAP

161024

That is to testify to the accuracy of the aforementioned argument provided by me is to the best of my awareness.

Mr. Shivam Dhingra   Head of the Department/Project Coordinator

  ZScaler   Shivam Dhingra

  Mohali   *shivam dhingra*
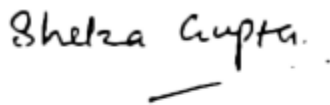
  Punjab

Date:

DECLARATION

I hereby declare that the work reported and submitted in the B.Tech. Project Report Patents And Prior -Arts submitted at Jaypee University of Information Technology, Waknaghat, India is an authentic record of our work carried out under the mentor-ship of Ms. Shelza Gupta, Manager at GreyB Research Pvt. Ltd . I have not submitted this work elsewhere for any other degree or diploma. This is to certify that the above statement made by the candidate is act to the best of my knowledge.

SHIVAM RASRAJ

161026

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

Shelza Gupta.

SHELZA GUPTA (Manager, Search Team at GreyB)

GreyB Services Pte Ltd
email: shelza.gupta@greyb.com (fastest way to reach me)
US(Mobile): +1 202 455 5058 | Singapore(HQ): +65 84 306 322
Address: 1 Scotts Road, #24-05, Shaw Centre, Singapore 228208

DATE:

Head of the Department/Project Coordinator

ACKNOWLEDGEMENT

I would like to thank every person that has conferred to the development of this project, which is the final stage of our Bachelor Education in Electronics and Communication Engineering at Jaypee University of Information Technology, Wakhnaghat, and Solan. I want to thank my manager and supervisor Mr. Abhijit Baliga, for his advice and supervision during the development of the project. I would also like to thank Mr. Yatin Gambhir for helping me throughout the project in the inventory. And I would also like to thank every Amazon employee who provided us with the necessary information, advice and support throughout the internship.

Megham Garg 161031

Inbound manager intern Amazon

DEL4 Gurugram, Haryana

Project Report Undertaking

I, <u>Mr. Sparsh Mahajan</u>, Roll No. <u>161037</u> Branch <u>ECE</u>is doing my internship with <u>Amazon</u>from <u>February 03,2020</u> to <u>June 26, 2020</u>.

As per procedure I have to submit my project report to the university related to my work that I have done during this internship.

I have compiled my project report. But due to COVID-19 situation my project mentor in the company is not able to sign my project report.

So I hereby declare that the project report is fully designed/developed by me and no part of the work is borrowed or purchased from any agency. And I'll produce a certificate/document of my internship completion with the company to TnP Cell whenever COVID-19 situation gets normal.

Signature

Name: Sparsh Mahajan

Date: May 30, 2020

ACKNOWLEDGEMENT

I am grateful to the authorities of lido learning (quality tutorials), Noida for having me to go ahead with the organisation and work on the model of sales and marketing in partial fulfilment of Bachelor of Technology (Electronics and Communication Engineering)degree syllabus of Jaypee University of Information Technology.

I am extremely grateful to Mr.Shubham Sharma, Mr.Arya anand(Manager) for their time to time guidance and help extended during each stage of our model.

Further I would like to thank Mr.Divvyam Hans (Manager) for their kind help extended during the entire period of my internship and for their time to time guidance and help extended during each stage of our internship.Finally, I would like to thank each and every member of lido learning for making me feel comfortable and helping me in every possible manner.

Date: 23rd may, 2020

 Thank You,

Bahar Sharma

161043

ACKNOWLEDGEMENT

It is my privilege to express my sincerest regards to my Manager **Mr. Akshay Anand (Territory Manager, Gurgaon)** for his valuable inputs, able guidance, encouragement, whole-hearted cooperation and direction throughout the duration of the project.

I deeply express my sincere thanks to my mentor **Mr. Nitish Shekhar (Channel Development Manager, North)** for encouraging and mentoring me throughout the internship.

At the end I would like to thank the **Amazon Student Program Team** and my guide **Dr. Rajiv Kumar (Associate Professor, Jaypee University of Information Technology)** who kept a constant record of any challenges faced during the internship program.

<div align="right">

Sanchit Garg (161051)

Operations Manager Intern,

ATSPL

</div>

ACKNOWLEDGMENT

The internship opportunity I had with Lido Learning was a great chance for learning and professional development. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many wonderful people and professionals who led me though this internship period.

I express my deepest thanks to Mr. Rythem kaushal, [Manager Business Development], for taking part in useful decision & giving necessary advices and guidance and arranged all facilities to make life easier. I choose this moment to acknowledge his contribution gratefully.

I perceive as this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation in the future,
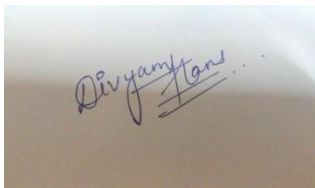

Yours Sincerely,

Riya Tyagi

CERTIFICATE

This is to certify that the work which is being presented in this training report for **"SALES AND MANAGEMENT Training program done under QUALITY TUTORIALS, LiDO LEARNING SECTOR-2, NOIDA''** in partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Electronics and Communication Engineering submitted to the Department of Electronics and Communication Engineering, **JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT** is an authentic record of work carried out by **SUGHOSH SHARMA (161058)** during a period from 11/02/2020 to 23/03/2020 under the supervision of **MR. DIVYAM HANS** .

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

Date: 23 May 2020

Divyamftand...

Signature of Supervisor   Signature of HOD   Signature of External

Dr. DIVYAM HANS   Dr. M.J. NIGAM   External Examiner

Manager Lido learning   Prof, and Head

Department of Electronics and communication

Engineering JUIT, Waknaghat

DECLARATION BY THE SCHOLAR

We hereby declare that the work reported in the B.Tech Project Reportentitled **"INTERNSHIP IN DESIGNING AND OPTIMIZATION DOMAINAT ERICSSON GLOBAL INDIA LTD"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Mr. Ritish Bajaj** (Manager (Core), Ericsson Global India Ltd)**.** We have not submitted this work elsewhere for any other degree or diploma.

Ashish Kumar

161061

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

Head of Department

Electronics andCommunication

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **"End semester Internship at LiDO"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of my work carried out under the supervision of **Mr. Jatin Sharma.** I have not submitted this work elsewhere for any other degree or diploma.

Ritankshee

161066

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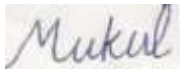
Mr. Jatin Sharma

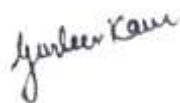**Manager**

LiDO Learning, Noida

Date:

DECLARATION

I hereby announce that the work reported in the B.Tech Project Report titled**"Airbnb app"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an accurate record of my work carried out under the guidance of**MrsGurleen Kaur.** I have not submitted this work elsewhere for any other degree or diploma.

Mukul

Mukul Gupta
161067

I announce that the Airbnb app project report is my unique work and has not been submitted to some other University.

Gurleen Kaur

MrsGurleen Kaur
Head of iOS Department
Code Brew Labs

Head of the Department/Project Coordinator

DECLARATION

I hereby declare that the work reported in this report entitled **"CRON BASED**

DASHBOARD DESIGN FOR OEM EQUIPMENT MANAGEMENT" *in partial*

fulfillment of the requirements for the award of the degree of **Bachelor of Technology**

in **Electronics and Communication Engineering** *submitted in the department of*

*Electronics and Communication Engineering***,** *Jaypee University of Information*

Technology Waknaghat is an authentic record of my own work carried out over a

period from Feb 2020 to May 2020 under the supervision of **(Arun Saini)** *(Senior*

Engineer, Ericsson Global India) and **(Ankit Srivastava)** *(Senior Engineer, Ericsson*

Global India).

The matter documented in the report has not been submitted anywhere for the award of

any other degree or diploma.

Akhilesh Kumar
(1610720)

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

Arun Saini
Senior Engineer
BMAS SA MSN SLOP SDU
BH 2LO TXN FM
arun.saini@ericsson.com

Ericsson Global India Pvt. Ltd.
Knowledge Boulevard, Sector-62, Noida
Gautam Buddha Nagar, U.P - 201301
0120 302 9200

ERICSSON

Declaration

We hereby declare that the work reported in the B.Tech Project Report entitled **"Second Level Assurance in 4G Radio Access Network"**submitted at Jaypee University of Information Technology, Waknaghat, India is an authentic record of our work carried out under the supervision of Akash Jaiswal Senior Engineer at Ericsson Global India Ltd. We have not submitted this work elsewhere for any other degree or diploma.

Yashvir Singh

161074

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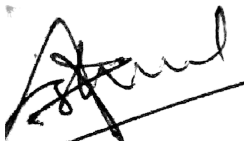
Mr. Akash Jaiswal

Senior Engineer

Ericsson Global India Ltd

Head of the Department/Project Coordinator

DECLARATION

 I hereby declare that the work reported in the B.Tech Project Report entitled **"PROCURRING CLOUD COMPUTING SOLUTIONS IN AWS EXPENDING ARTIFICIAL INTELLIGENCE AND ANALYTICAL TOOLS"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of **Mr. Sachin Chidrewar** We have not submitted this work elsewhere for any other degree or diploma.

ANSHUL   KUMAR

161076

Department of Electronics and Communication

Jaypee University of Information Technology

This is to certify that the above declaration is correct and genuine to my best knowledge.
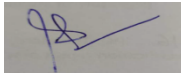
Sachin Chidrewar

Talent acquisition deptt, Cognizant Technology Solutions

24th May 2020

CERTIFICATE

This is to certify that the project titled **CORE** is a record of the bonafide work done by **HarshitaRana**(161077) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in **Electronics and Communication Engineering** of JAYPEE UNIVERSITY OF INFORMATION AND TECHNOLOGY during the academic year 2019-20.

Dr. Sunil Datt Sharma

Project Guide,

Electronics and
Communication
JUIT

<u>DECLARATION</u>

This is to certify that the work titled "Understanding The Concepts of Cloud Computing Under Amazon Web Services Domain at Cognizant Digital Solutions", submitted by Stakshi Sharma under the pafrtial fulfillment for the award of Bachelor of Technology in Electronics and Communication of Jaypee University of Information Technology 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.
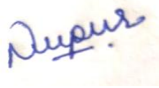
Signature of Supervisor

Mr. Karthick Selvam

Cognizant Technical Solutions

DECLARATION

I hereby declare that the work reported in the B. Tech Project Report entitled **AMAZON OPERATIONS** submitted at **Jaypee University of Information Technology, Waknaghat, India**is an authentic record of my internship in AMAZON Operation as Area Manager Intern, carried out under the supervision of my hiring manager/Mentor **Madhav Dhingra.** And I have not submitted this work elsewhere for any other degree or diploma.
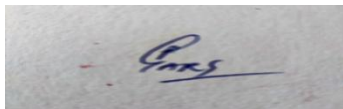
This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Owner-

Nupur Chaturvedi (161088)
DATE: 24th MAY, 2020

Project Mentor (University) -
Mr. Pardeep Garg
Deptt. – ECE (JUIT)

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **"Business Development in the startup world"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of Dr. Neeru Sharma**.** I have not submitted this work elsewhere for any other degree.

Diuman Mahajan

161089

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

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

Dr. Neeru Sharma

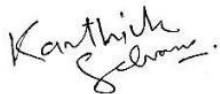(Project Coordinator)

DECLARATION

I hereby declare that the work reported in this report entitled **"A QUALITATIVE APPROACH TO THE MANAGEMENT OF AWS CLOUD INFRASTRUCTURE"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Electronics and Communication Engineering** submitted in the department of Electronics & Communication Engineering**,** Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2020 to May 2020 under the supervision of **Karthick Selvam** (Project Manager) and **Princy J,Mano** (Senior Manager Operation Support, Cognizant).

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

Payoosni Singh (161091)

This is to certify that the above statement made by the candidate is true to the best of my Knowledge.
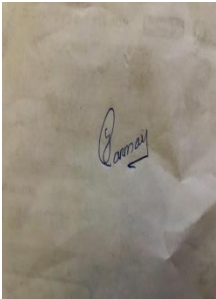
Mr. Karthick Selvam
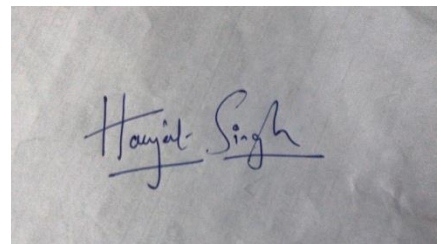**Project Manager- Cognizant**
Date: May 25.2020

DECLARATION

We hereby declare that the work reported in the B.Tech Project Report entitled **"SALES AND MARKETING"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out under the supervision of HARJEET SINGH **.** We have not submitted this work elsewhere for any other degree or diploma.

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.
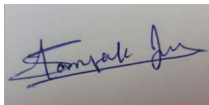
TANMAY CHAUDHARY(161094)

HARJEET SINGH

(BUSINESS DEVELOPMENT   MANAGER)

DECLARATION

I hereby declare that the work reported in this report entitled **"AUTOMATION ROOT CAUSE ANALYSIS IN TELECOM"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Electronics and Communication Engineering** submitted in the department of Electronics & Communication Engineering**,** Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from Feb 2020 to May 2020 under the supervision of **Dinesh Kumar**(Program Manager) and **Neeraj Bhatnagar** (Senior Manager Operation Support, Ericsson).

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

Samyak Jain

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

Neeraj Bhatnagar

Senior Manager

SDU Bharti-BMAS SA MNS SLOP SDU BH Tools & Auto

Mobile:+917838290356

Neeraj.n.bhatnagar@ericsson.com

Ericsson

Knowledge Boulevard

201309,Noida,Uttar Pradesh

India

Ericsson.com

DECLARATION

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

AJAY THAKUR
161100

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

.

Abhishek Sekhri

Date:

Head of the Department

DECLARATION

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

Prashant

PRASHANT SHARMA
161108

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

Mr. SURENDRA BIJWE

CA-MANAGER, Ericsson global services India Pvt. Ltd

ERICSSON
Surendra Bijwe
Manager, Ericsson Global India Pvt. Ltd.
Mobile +91-9022675777
surendra.bijwe@ericsson.com
www.ericsson.com

Date: 1st June 2020

DECLARATION

This is to certify that the work titled **"Student Report"**, submitted by **Abhishek Sharma** under the partial fulfillment for the award of Bachelor of Technology in Electronics and Communication of **Jaypee University Of Information Technology** has been carried out under my supervision. This work has never been submitted elsewhere for the award of this or any other degree or diploma.

Abhishek Sharma

856600

Karthick Selvam

Cognizant Technology Solutions

DECLARATION

I hereby declare that the work reported in the B. Tech Project Report entitled **BUISNESS DEVELOPMENT PROJECT** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of my work carried out under the supervision of my Manager Sakeet Raina. I have not submitted this work elsewhere for any other degree or diploma.

ARUSHI VERMA

 161112

Sakeet Raina

Sakeet Raina

Buisness Development Manager

(Project Supervisor)

Date- 25 May 2020

DECLARATION

I hereby declare that the work reported in the B.Tech Project Report entitled **"**Unified Functional Testing**"** submitted at **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of our work carried out in the internship at Cognizant Technology Solutions under the supervision of our guide Sowndhariya Ravichandran**.** I have not submitted this work elsewhere for any other degree or diploma.

Mukul Bhatia

171003

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

Sowndhariya Ravichandran

Date: 19/05/2021

Head of the Department/Project Coordinator

Candidate's Declaration

I hereby declare that the work presented in this report entitled **"Technology driven business development strategies and tools"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Electronics and Communication Engineering** submitted in the department of **Electronics and Communication Engineering,** 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 Gajendra Singh** (**Team leader and Asst. Manager – Admissions, Dadar**).

Soham Ahuja (171015)

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

Mr Ganjendra Singh

(Team Leader & Asst. Manager)

Dated: 21-05-2021

Field Projects/ Internships

Department of
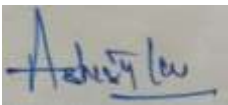# Civil Engineering

2020

CERTIFICATE

This is to certify that the work which is being presented in the project report titled **"BUSINESS DEVELOPMENT: SALES AND MARKETING VIA B2C MODEL"** in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Civil Engineering and submitted to the Department of Civil Engineering, **Jaypee University of Information Technology, Waknaghat** is an authentic record of work carried out by **Nikhil Kumar (161626)** during a period from February 2020 to May 2020 under the supervision of **Dr. Ashish Kumar** Department of Civil Engineering, JUIT, Waknaghat.

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

Date: May 27, 2020

Signature of Supervisor   Signature of HOD   External Examiner

 Dr. Ashish Kumar Rohilla   Dr. Ashok Kumar Gupta

 Department of Civil engineering   Derpartment of Civil engineering

 JUIT, Waknaghat   JUIT, Waknaghat

CERTIFICATE

This is to certify that the work which is being presented in this training report for **"SALES AND MANAGEMENT Training program done under QUALITY TUTORIALS, LiDO LEARNING SECTOR-2, NOIDA''** 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 **UTKARSH CHAUHAN (161687)** during a period from 11/02/2020 to 23/03/2020 under the supervision of **MR. SAURABH RAWAT** Department of Civil Engineering, Jaypee University of Information Technology, Waknaghat. The above statement made is correct to the best of my knowledge.
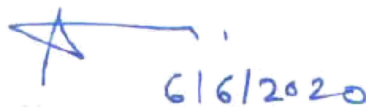
Date: June 4th, 2020 …………………

6|6|2020

Signature of Supervisor   Signature of HOD   Signature of External

Dr. SAURABH   Dr. ASHOK KUMAR   External Examiner

   RAWAT   GUPTA

Assistant Professor   Professor and Head

Department of   Department of

Civil Engineering   Civil Engineering

JUIT, Waknaghat   JUIT, Waknaghat

Field Projects/ Internships

Department of
Biotechnology & Bioinformatics

2020

CERTIFICATE

It is to certify that the project report titled "**Emerging Trends in Data Engineering : Amazon Web Services**" submitted by **Tanya Singh (161502)** to the Department of Biotechnology and Bioinformatics in partial fulfillment of requirement for the degree of Bachelor of Technology in Bioinformatics from Jaypee University of Information Technology has been carried out under my supervision and this work has not been submitted elsewhere for a degree.

Dr. Raj Kumar

Name of Supervisor   :: Mrs. Princy J.Mano

CERTIFICATE

This is to certify that the work reported in the B.Tech Academic report entitled '*AR / VR based Healthcare Digital Marketing Service Providers Market, 2020-2030*' submitted by **Sunidhi Thakur** in partial fulfillment for the award of degree of B.Tech. Bioinformatics 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.

Ms. Shifali Gupta

Senior Business Analyst

Roots Analysis Pvt. Ltd.

Date:

Dr. Raj Kumar