(June  $4^{th} - 9^{th}$ , 2018)

National workshop on 'Statistical Techniques in Biological and Medical Sciences'

## **STBMS - 2018**

Department of Mathematics and BI/BT Jointly organized a one week **national workshop** on Statistical Techniques in Biological and Medical Sciences (STBMS-2018) during 4-9 June, 2018. It was the second edition of this workshop, coordinated jointly by Dr. Neel Kanth and Dr.Tiratha Raj Singh.

Dr. Suresh Sharma and Dr. Amar Nath Gill, Professors, Dept of Statistics, Panjab University; along with Dr. S K Gupta, Associate Professor, Dept of Mathematics, IIT Roorkee were some of the noted speakers of the event.













## **Second National Workshop on**

# Statistical Techniques in Biological and Medical Sciences (STBMS-2018)

June 04-09, 2018



#### Workshop on Statistical Techniques in Biological and Medical Sciences STBMS-2018

Interactive Lectures & Lab sessions by Experts On Statistical Tools, Techniques and Their Applications

#### June 04 - 09 2018

#### Topics to be covered

- . Descriptive and inferential Statistics
- Correlation and Regression: Predictors Teeting, MLR, Multicollinearity, Versence inflation factor (VIF), Logietic regression
- Hypothesis Testing-Parametric and Non-Parametric , Factor, Gluster and Principal Component Analysis (PCA)
- Survival analysis and Stochastic Modelling, Multiple comparison procedures, Order Restricted Inference
- One-two and three way ANOVA, ANOVA with repeated trigin
- CRD, RBD, LSD, IBD, BIBD, Factorial Designs
- Case Studies on Biological and Biomedical Data
- Leb work using Excel, SPSS, and R

#### **Speakers**

Dr. Amar Nath Gill,

PU, Chandigarh

Dr. Suresh Sharma,

PU, Chandigarh

Dr. S.K. Gupta,

IIT, Roorkee

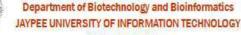
**Workshop Coordinators** 

Dr. Tiratha Raj Singh Mobile: +91 8091004695

Dr. Neel Kanth Mobile: +91 8894227228

#### About JUIT

JUIT is apread over 25 acres of lush green picturesque slopes of Waknaphat, in District Solen of Himachai Pradesh, creating a tranquil environment that can heighten the opinit and energy level of all learners and inspire them to optimize their learning efforts.



Waknaghat, Solan

Department of Mathematics &

#### www.juit.ac.in/stbms\_2018

#### stbms2018@gmail.com

About the Workshop: Biostatistics has become a defined branch of science that uses an intricate combination of Statistics, Probability, Mathematics and Computation to model and solve real life problems in biological and biomedical sciences. As a discipline designed to yield information, biostatistics may also be considered as a highly-developed stream which in turn forms part of the developing and expanding field of bioinformatics. Consequently, biostatistics draws quantitative methods from fields including statistics, operations research, economics, and mathematics in general; and it is applied to research questions in fields such as public health (including epidemiology, nutrition, environmental health, and health services research), genomics, proteomics, population genetics, medicine, and ecology. Research in medicine and public health has been both a beneficiary of this new methodology and a source of new problems. It is anticipated that this workshop will help the biologists, biotechnologists, biomedical scientists and students from all these streams to gain insight into statistical analyses, it will also help engineers, mathematicians, statisticians, and computer scientists to explore new dimensions for their scademic and research activities.



#### Application Procedure

Send your application to the given email in the provided application form. Last date of submission of application is May, 15, 2018.

#### Registration Fees and Accommodation;

Registration fee includes all working lunches/tea during the program and registration kit along with study material. Accommodation on sharing basis in JUIT hostels will be facilitated.

137	Registration Fee		
Perticipante	Without accomode- tion (Up-to May 15, 2018)	With accommo- detion (Up-to May 15, 2018)	
Studente (UC/PC)	2500/-	3500/-	
Research Fellows	3000/-	4000/-	
Faculty	4000/-	5000/-	
Industry/ Others	7000/-	8000/-	

O1st Feb, 2018 (Registration Opens)
 15m May, 2018 (Registration Closes)

Jaypee University of Information Technology, Waknaghat, P.O. Waknaghat, Teh. Kandaghat, Distt Solan

Teh. Kandaghat, Distt. Solan PIN-173 234 (H.P.), India, Phone: (01792) 239385/ 239259

#### Day 1: Inauguration (04/06/2018)

Prof. Dr. Vinod Kumar (Vice-Chancellor, JUIT), Maj Gen Rakesh Bassi (Retd.) (Registrar and Dean of Students), Prof. Samir Dev Gupta, Dean (Academics & Research) and Prof. Suresh Sharma (Guest of Honor) were the dignitaries in the workshop. Participants from various parts of the country joined the workshop which includes H.P, Punjab, U.P., Delhi and NCR, Haryana, Telangana, Rajasthan and Gujarat. Dr. Tiratha Raj Singh (Coordinator: STBMS) mentioned the journey of the STBMS and CEHTI. With the successful completion of first edition in 2016, the legacy of STBMS is now very well spread across the country.

Prof. Sudhir Kumar (HoD and Program Chair) introduced the Department of Biotechnology and Bioinformatics. Prof. Karan Jeet Singh (HoD and Program Chair) speak about the Department of Mathematics. Prof. Samir Dev discussed the importance of statistics. Maj Gen Rakesh Bassi (Retd.) speak about the JUIT academic and administrative process. Prof. Suresh Sharma (Guest of Honor) speaks about the statistics. He mentioned that statistics is the backbone of any field. It is widely used in various sectors and encouraged participants for interactive sessions.

Prof. Dr. Vinod Kumar (VC) had spoken about the workshop and explained the importance of statistics and its interaction with several emerging techniques. He cherished this good initiative where two departments are jointly organizing the workshop. Lastly, Dr. Neel Kanth (Coordinator: STBMS) gave the vote of thanks to all the dignitaries and participants.

#### Day 1: Lectures and Lab (Prof. Suresh K. Sharma) (04/06/2018)

**Prof. Suresh K. Sharma, PU, Chandigarh** described the mean, median, mode, standard deviation, categorical variable and continuous variable, Kurtosis, skewness of the data etc. Assignment to all the participants on the IBM® SPSS® software platform for statistical analysis, which includes a vast library of machine learning algorithms, text analysis, open-source extensibility, integration with big data, and seamless deployment into applications were given with a clear and attractive introduction to SPSS. Then all the participants performed various operations which they explored in the theory session.

#### Day 2: Lectures and Lab (Prof. Suresh K. Sharma) (05/06/2018)

Logistic Regression, MLR, Odds ratio, risk ratio, and ROC curve were discussed. Correlations and their types such as Karl person, Spearman's Rank, Multiple (R<sup>2</sup>), Partial Correlation coefficients. Correlation ratio, and Non-linear correlations were discussed in detail along with the different types of scales and measures of association. Prof. Sharma described the Chi-square test etc. Then he control to the control of the

nominal, Ordinal by ordinal, Nominal by ordinal, Nominal by interval, etc. Basic regression concept was described for example if the data has multi-collinearly the Ridge regression can be applied. He demonstrated the True positives, True negatives, false positives, and false negatives. Then in a hands-on session with the data where he has shown different types of error calculations followed by the receiver operating curve construction.

#### Day-3: Lectures and Lab (Dr. R.S. Durai and Dr. Tiratha Raj Singh) (06/06/2018)

Dr. Raja Durai gave a lecture on SPSS and its applications in statistics. He explained about SPSS in details. Lab exercise for the same were also performed by the participants. Dr. Tiratha Raj Singh introduced R programming language to the participants. The participants installed the R and R studio software and practice the R exercise. The lab session has been assisted by Mr. Rohit Shukla. The students solved the exercise and enjoyed the R learning.

#### Day-4: One Day Excursion to Shimla (07.06.2018)

After two days of rigorous learning, a visit to Shimla for all the participants was organized. The participants have visited the Indian Institute of Advanced Studies, Shimla, a historical and heritage building and popular Mall road and Ridge Maidan of Shimla. They were very excited to see this attractive place. After that, they did the tracking and reach the Jakhu Temple which is a historical temple related to the Hindu lord Hanumana with 108 feet high statue of Lord Hanumana. All enjoyed the trip very well.

#### Day 5: Lectures and Lab (Prof. Amar Nath Gill) (08.06.2018)

Prof. Gill has covered Correlation and association of attributes, Simple and multiple linear regressions, regression with dummy variables, and others. He also described the Principal Component analysis (PCA) and factor analysis. In the PCA, several examples were given. He calculated the PCA using SPSS and then participants practiced it. He has also shown how one can draw the screen plot using the SPSS. The participants calculated the PCA and did other analyses using SPSS and then the session ended.

#### Day 5: Lectures and Lab (Prof. Amar Nath Gill) (08.06.2018)

Prof. Gill covered idea of multiple comparison procedures and pair-wise comparison and comparison with test & control and described proper ways to use these techniques. Prof. Gill covered Ranking and Selection Problems and Order restricted comparison procedures in great detail. He also mentioned that these techniques have several applications in life sciences as well as biomedical data analysis. Since the processes exhibit randomness and are generally quite complex, the processes need to be simulated to gather information about them.

#### Day 6: Lectures and Lab (09.06.2018)

Dr. Tiratha Raj Singh introduced bioinformatics in a very interactive lecture. He has introduced the central dogma of bioinformatics and importance of bioinformatics. Nowadays bioinformatics is a major field to solve biological problems. He has described the systems biology approach, genomics analysis using microarray analysis, structural bioinformatics approach, and others approaches to solve problems in biology.

Dr. Bhupendra Kumar Pathak covered various aspects of statistics such as Probability and Distribution: Random variables, probability mass functions, probability density functions, Binomial, Poisson's, and Normal distributions in good detail. The next session was taken by Dr. Saurabh Shrivastava who covered various tests such as Parametric tests Z, t, F, and Chi-square tests. The hands on lab session by Dr. Bhupendra Kumar Pathak covered various excel techniques to the students to apply statistics.

#### Day 6: Lectures and Lab (09.06.2018)

The session by **Dr. Saurabh Shrivastava** covered Non-parametric tests, Sign test, Wilcoxon rank-sum test, Kruskal-Wallis test, Friedman test, and Run test followed by the lab session to ikplement all these techniques.

#### **Valedictory Function**

Prof. Dr. Samir Dev Gupta (Dean, A&R) felicitated organizing team which includes Dr. Tiratha Raj Singh, Dr. Neelkantha, Dr. Ragini Raj Singh, etc. Certificates were distributed to the external and internal participants by the Dean of JUIT. The appreciation certificates were distributed by the registrar, JUIT to the organizing team members.

#### **Participation Information:**

S. No	Participation in the event	Nos.	
I.	Key-note speakers	4	
II.	Senior Scientist	5	
III.	Young Scientist	4	
IV.	Postgraduate Students	4	
V.	Undergraduate Students	4	
VI.	Industry persons	1 SETY OF INFORMAN	
VII.	Other category (Please specify each category)	20 (Faculty) Sylesearch scholars) IQAC	
		*Mary aug 1	



# Statistical Techniques in Biological and Medical Sciences STBMS-2018 June 04-09, 2018 Technical Program

Session	Time	Topic	Faculty
Day-1 (04.06.2018)			
Pre-Lunch Session	9:00-10:00	Registration	
	10:00-10:40	Inauguration	
	10:40-11:00	High Tea	
	11:00-12:30	Lect-1 & Discussion, Topic: Introductory lecture on statistics and its applications in Biology and medicine, Descriptive and Inferential problems: An Introduction and use	Dr. Suresh K. Sharma
	12:30-14:00	Working Lunch	
Post-Lunch Session		No. of the control of	
	14:00-15:00	Lect-2 & Discussion, Topic: Correlation and Regression: Assumptions, Test for regression coefficient, Diagnostic for Multicollinearity	Dr. Suresh K. Sharma
	15:00-15:15	Refreshments & Afternoon Tea	
	15:15-17:00	Lab: Introductory Lab session and Assignment Using SPSS	Dr. Suresh K. Sharma
Day-2 (05.06.2018)			
Pre-Lunch Session	9:30-10:45	Lect-3 & Discussion, Topic: Logistic Regression, MLR, Odds ratio, risk ratio, and ROC curve.	Dr. Suresh K. Sharma
	10:45-11:00	Tea Breaks & Refreshments	
	11:00-12:30	Lect-4 & Discussion, Topic: Hypothesis Testing I- Parametric (t-test, One-Way, Two- way and Repeated Measures ANOVA)	Dr. Suresh K. Sharma
	12:30-14:00	Working Lunch	
Post-Lunch Session	25 W		
	14:00-15:00	Lect-5 & Discussion, Topic: Cohort Case- control studies, Cross-sectional epidemiological studies	Dr. Suresh K. Sharma
	15:00-15:15	Refreshments & Afternoon Tea	
	15:15-17:00	Lab Session: Assignment Using SPSS (Dr. Sure	sh K. Sharma)
Day-3 (06.06.2018)		The second secon	
Pre-Lunch Session	9:30-10:45	Lect-6 & Lab, Topic: SPSS tutorial session on statistical analyses: Part-I.	Dr. R.S. Durai
	10:45-11:00	Tea Breaks & Refreshments	
	11:00-12:30	Lect-7 & Lab, Topic: SPSS tutorial session on statistical analyses: Part-II.	Dr. R.S. Durai
	12:30-14:00	Working Lunch	
Post-Lunch Session	(S) (S)		
14:00 -15:00 R Lab session for statistical analysis of bio		R Lab session for statistical analysis of biologic	al data with afternoon





#### Statistical Techniques in Biological and Medical Sciences STBMS-2018

June 04-09, 2018

**Technical Program** 

Day-4 (07.06.2018)	One Day Excu	rsion (Contributory)	
Day-5 (08.06.2018)			
Pre-Lunch Session	9:30-10:45	Lect-8 & Discussion, Topic: Hypothesis Testing II- Non-Parametric (Analogous to parametric testing, Chi-Square tests, K-S test).	Dr. Amar Nath Gill
	10:45-11:00	Tea Breaks & Refreshments	
	11:00-12:30	Lect-9 & Discussion, Topic: Design of experiments: Basic principles, CRD (completely randomized design), RBD (Randomized block designs), Post-hoc tests.	Dr. Amar Nath Gill
	12:30-14:00	Working Lunch	
Post-Lunch Session			
	14:00-15:00	Lect-10 & Discussion, Topic: Principal component analysis (PCA), Factor analysis, Linear Discriminant analysis (LDA), Cluster analysis.	Dr. Amar Nath Gill
	15:00-15:15	Refreshments & Afternoon Tea	
	15:15-17:00	Lab Session: Example Details, Handouts, Data files and Worksh Assignments	
Day-6 (09.06.2018)		Francisco School Control of the Cont	
Pre-Lunch Session	9:30-10:45	Lect-11 & Discussion, Topic: Idea of Multiple comparison procedures and pair wise comparison and comparison with best & control.	Dr. Amar Nath Gill
	10:45-11:00	Tea Breaks & Refreshments	
	11:00-12:00	Lect-12 & Discussion, Topic: Ranking and Selection Problems, Order restricted comparison procedures.	Dr. Amar Nath Gill
	12:00-13:00	Feedback & Valedictory function	
Lunch Session			
	13:00 - 14:00	Farewell Lunch and Bye Bye	

Dr. Tiratha Raj Singh & Dr. Neel Kanth

Coordinators: STBMS-2018
Contact: stbms2018@gmail.com



#### **Photographs Section:**

#### **Inaugural Session and General Photographs:**











#### **Patrons**

Prof. Dr. Vinod Kumar Vice-Chancellor, JUIT, Waknaghat

Prof. Dr. Samir Dev Gupta

Director & Academic Head

HoD, ECE

**Finance Chair** 

Maj Gen Rakesh Bassi (Retd.) Registrar and Dean of Students

**Program Convener** 

Dr. Meenakshi Sood

Dept. Coordinator ECED

&

Dr. Shruti Jain

Associate Professor Dept. of ECE

#### Contact:

01792-239204,303 meenakshi.sood@juit.ac.in shruti.jain@juit.ac.in



**Electronics & Communication Engineering Department** 

The Department offers a four-year undergraduate program (B. Tech) and a two-year postgraduate pro-gramme (M. Tech) in Electronics and Communication Engineering. The Department also runs an active doc-oral programme. The courses offered cover areas related to Signal Processing, VLSI Circuit, Embedded Systems, Microwave Engineering and Communication Systems.

The Department provides research facilities including a library with the latest journals to its faculty members & interested students and encourages them to do re- search in the upcoming areas. The department also has research collaboration with universities abroad and has joint research projects.

#### Registration

Participants can register by sending the duly filled registration form along with registration fee. Fees can be submitted online.

Registration (without Accommodation, lunch only) Rs 1000/-Registration (with Accommodation and all meals) Rs 2500/-

Meenakshi Sood & Shruti Jain Department of ECE, Jaypee University of Information Technology Waknaghat, Solan, Himachal Pradesh-173234



#### FACULTY DEVELOPMENT PROGRAM

on

EMERGING TRENDS IN VLSI AND COMMUNICATION (ETVC-18)
09 – 18 June, 2018

## Organized by:

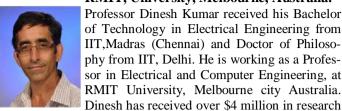
Dept. of Electronics & Communication Engineering Jaypee University of Information Technology Waknaghat, Solan, HP 173234

www.juit.ac.in



## External Resource Persons Prof. Dinesh Kant

RMIT, University, Melbourne, Australia.



funds over the past 12 years in research funding.

### Dr. Shubhajit Roy Chowdhury



Dr. Shubhajit Roy Chowdhury did his M.Tech and PhD from the Jadavpur University. He was gold medalist in M.Tech as well as B.Tech program. His research interest includes VLSI Architectures, Biomedical Embedded Systems, Non invasive diagnostic systems etc. Prior to joining IIT Mandi, he

was associated with IIIT Hyderabad, Indian Statistical Institute, Kolkata, and Jadavpur University. Elected as a member of Award Committee for Gandhian Young Technological Innovation (GYTI) Award by the Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) in the area of Health Care devices in the year 2018.

### Prof. (Dr.) Vinod Kumar





Dr. Vinod Kumar was Deputy Director and Professor of Electrical Engineering at IIT Roorkee. He received his B.Tech degree from Punjab Engineering College, Chandigarh and M.Tech. & Ph.D. from IIT Roorkee He has many academic awards, distinctions and

scholarships to his credit including the Khosla Research Awards of University of Roorkee, Ist IETE-R S Khandpur Medical Instrumentation Gold Medal in recognition of life time achievements and outstanding contribution in the field of Biomedical Instrumentation 2006.

#### **CoreEL Technologies**



Enabling Excellence

CoreEL is a leading systems design, FPGA Core and Design services company, located in Bangalore, India's Silicon Valley. We are a pioneer among the Indian companies that envisaged the

concept of IP cores and made it a successful business proposition. CoreEL is associated with Xilinx as a distributor for over twenty years, from 1993 onwards and has the credit of popularizing Xilinx FPGA technology in India. Name CoreEL stands for Core Electronics and that is our strength. We are a Customer Application Specific Product & Solutions (CASPS) company offering innovative solutions, ranging across Intellectual Property (IP) cores, Design & Development, -System Design & Prototype Development, Next-Gen Digital products, integrated solutions, Low Volume Manufacturing, System Upgrades and Obsolescence management, EDA tools, COTS products, Semiconductor solutions and Technology Training.

### Laboratory Virtual Instrument Engineering-Workbench (LabVIEW)



LABVIEW is a system-design platform and development environment for a visual programming language from National Instruments. The graphical language is named "G"; not to be confused with G-code. Originally released for the Apple Macintosh in 1986, LabVIEW is commonly used for data acquisi-

tion, instrument control, and industrial automation on a variety of operating systems(OSs), including Microsoft Windows, various versions of Unix, Linux, and macOS.

#### AdvanceTech India Pvt Ltd

AdvanceTech India Pvt Ltd, Zirakpur which deals in the field of



Hardware Development, Embedded Products Development, Security & Surveillance and Engineers Training Programs. AdvanceTech India Pvt. Ltd. an Embedded Design House. AdvanceTech

India Pvt. Ltd. offers various Technical Education solutions, Products & Development tools to Engineering colleges, Universities, research organizations. We also offer the business of providing Technical education solutions & development tools to the educational & industrial customers.

#### SCHEDULE

### Registration Begins: 9:00 am (June 9th 2018)

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Date	Time	Events
09-06-2018	09:30AM	Inaugural function
	10:00 AM	Expert Lectures by Dr. Shubhajit Roy Choudhary, IIT Mandi
11-06-2018	10:00AM- 4:00PM	Computational Paradigms - NI Lab View
12-06-2018	10:00AM- 4:00PM	Xilinx Vivado Tool Flow with FPGA based coding techniques Lecture by Mr. Ankur Sangal, Sr. Application Engineer, and Mr. Pa- ramahans Singh, Sr. Executive, CoreEL Technologies
13-06-2018	10:00AM- 4:00PM	IP Integrator using Xilinx Vivado Tool Lecture by Mr. Ankur Sangal, Sr. Application Engineer, and Mr. Pa- ramahans Singh, Sr. Executive, CoreEL Technologies
14-06-2018	10:00AM- 4:00PM	Changing Technological Paradigms: 3G, 4G, GSM and Wireless Communication
15-06-2018	10:00AM- 4:00PM	Recent trends in IoT and Antenna
16-06-2018	09:30AM	Expert Lecture by Prof. Dinesh Kant, Professor, Electrical and Biomedical Engineering, RMIT University, Austra- lia
18-06-2018	10:00AM	Expert Lectures by Prof. Vinod Kumar, JUIT Solan
	11:00 ANTO	Programming Paradigm on Optimiza- tion Tools
EE UM	IQA@M)	Valedictory
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# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, SOLAN DEPARTMENT OF ECE

#### FACULTY DEVELOPMENT PROGRAM ON

## **EMERGING TRENDS IN VLSI AND COMMUNICATION (ETVC)**

June 09<sup>th</sup> – 18<sup>th</sup>, 2018

### **SCHEDULE**

Registration Begins: 9:00 am (June 9<sup>th</sup> 2018)

Date	Time	Events
09-06-2018	09:30AM	Inaugural function
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18-06-2018	10:00AM	Expert Lectures by Prof. Vinod Kumar, JUIT Solan
	11:00 AM	Programming Paradigm on Optimization Tools
	1:00 PM	Valedictory



## EMERGING TRENDS IN VLSI AND COMMUNICATION (ETVC 2018)

#### **REPORT**

Department of Electronics and Communication Engineering organized a 10 days Faculty Development Program on "EMERGING TRENDS IN VLSI AND COMMUNICATION (ETVC 2018)". The program was scheduled from June 09<sup>th</sup> -18<sup>th</sup> 2018 at Jaypee University of Information Technology, Waknaghat, Solan, H.P with Dr. Meenakshi Sood and Dr. Shruti Jain as the Convener of the program.

The program was inaugurated by Dr. Subhajit Roy Chaudhary, Prof., School of Computing and Electrical Engineering, IIT Mandi, Prof. Vinod Kumar, Vice Chancellor, JUIT and Prof. Samir Dev Gupta, HOD ECED.

More than 30 faculty members from various universities / institutes, 20 Research scholars have participated in this FDP.





#### **Expert Lectures:**

a) *Dr. Shubhajit Roy Chowdhury* **IIT Mandi, India:** Dr. Shubhajit Roy Chowdhury did his M.Tech and PhD from the Jadavpur University. He was gold medalist in M.Tech as well as B.Tech program. His research interest includes VLSI Architectures, Biomedical Embedded Systems, Non invasive diagnostic systems etc. Prior to joining IIT Mandi, he was associated with IIIT Hyderabad, Indian Statistical Institute, Kolkata, and Jadavpur University. Elected as a member of Award Committee for Gandhian Young Technological Innovation (GYTI) Award by the Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI) in the area of Health Care devices in the year 2018. His topic for the talk was "VLSI: A tale of design or a tale of tools?"







b) Prof. Dinesh Kant RMIT, University, Melbourne, Australia: Professor Dinesh Kumar received his Bachelor of Technology in Electrical Engineering from IIT, Madras (Chennai) and Doctor of Philosophy from IIT, Delhi. He is working as a Professor in Electrical and Computer Engineering, at RMIT University, Melbourne city Australia. Dinesh has received over \$4 million in research funds over the past 12 years in research funding.





#### Hands on by various companies:

a) Laboratory Virtual Instrument Engineering- Workbench (LabVIEW) LABVIEW is a system-design platform and development environment for a visual programming language from National Instruments. The graphical language is named "G"; not to be confused with G-code. Originally released for the Apple Macintosh in 1986, LabVIEW is commonly used for data acquisition, instrument control, and industrial automation on a variety of operating systems(OSs), including Microsoft Windows, various versions of Unix, Linux, and macOS.







b) CoreEL Technologies CoreEL is a leading systems design, FPGA Core and Design services company, located in Bangalore, India's Silicon Valley. We are a pioneer among the Indian companies that envisaged the concept of IP cores and made it a successful business proposition. CoreEL is associated with Xilinx as a distributor for over twenty years, from 1993 onwards and has the credit of popularizing Xilinx FPGA technology in India. Name CoreEL stands for Core Electronics and that is our strength. We are a Customer Application Specific Product & Solutions (CASPS) company offering innovative solutions, ranging across Intellectual Property (IP) cores, Design & Development, -System Design & Prototype Development, Next-Gen Digital products, integrated solutions, Low Volume Manufacturing, System Upgrades and Obsolescence management, EDA tools, COTS products, Semiconductor solutions and Technology Training.









c) AdvanceTech India Pvt Ltd: AdvanceTech India Pvt Ltd, Zirakpur which deals in the field of Hardware Development, Embedded Products Development, Security & Surveillance and Engineers Training Programs. AdvanceTech India Pvt. Ltd. an Embedded Design House. AdvanceTech India Pvt. Ltd. offers various Technical Education solutions, Products & Development tools to Engineering colleges, Universities, research organizations. We also offer the business of providing Technical education solutions & development tools to the educational & industrial customers.





The FDP was concluded by Dr. Nishant Jain lecture on "Programming Paradigm on Optimization Tools" followed by valedictory on June 18, 2018.









## 7<sup>TH</sup> One Week Workshop on

# **Tools and Techniques for Data Analysis in Management Research June 11 - 17, 2018**

## Department of Humanities and Social Sciences Jaypee University of Information Technology Waknaghat, Solan

About the Workshop: The Department of Humanities and Social Sciences is organizing a Workshop on "Tools and Techniques for Data Analysis in Management Research". The Workshop is designed for Practicing Managers, Faculty members and research scholars in the field of management/social sciences as well as to any other person who is interested in conducting research using Data Analysis for his/her area of specialization. The department has successfully organized six workshops so far and this is the seventh one in the series.

**Objective:** To equip the participants with the knowledge of different tools and techniques used in the data analysis in modern day management/social sciences research so that they can add value to their research and knowledge domain.

#### **Topics:**

- Basic understanding of data
- Sampling and Questionnaire designing
- Hypothesis testing
- ANOVA, ANCOVA, MANOVA, MANCOVA
- Parametric and Non-Parametric Tests
- Factor and Cluster Analysis
- Discriminant Analysis
- Multidimensional Scaling and Conjoint Analysis
- Structural Equation Modeling
- Regression Analysis (Linear)
- Bivariate and Multivariate Regression Analysis
- Assumptions of Regression Analysis
- Multicollinearity, Heteroscedasticity and Autocorrelation in Regression Analysis
- Model Specification and Diagnostic Testing
- Dummy Variable Regression Models
- Logit, Probit and Tobit Models

**Pedagogy:** Lectures along with hands-on Practical classes will be the mode of conducting the Workshop. The Workshop is designed to impart theoretical knowledge as well as hands-on training using appropriate software to perform the test. It is advised that the participants should bring his/her own laptop for getting maximum benefit of the programme.

Softwares to be Used: SPSS and GRETL

#### **Programme Fee:**

 Participants with accommodation Rs 7,000/- & and without accommodation Rs 6,000/-.

The programme fee includes breakfast, lunch and dinner for all resident participants and only lunch for non-resident participants. The programme fee also includes tea & snacks and Workshop kit for all the participants. The accommodation will be arranged in the hostels on twin-sharing basis. Limited Seats are available on FIRST-COME-FIRST-SERVE basis.

Patrons : Prof. Vinod Kumar

Vice-Chancellor, JUIT

: Prof Samir Dev Gupta Director and Academic Head, JUIT

Organizing Secretary & : Dr. Amit Srivastava

**Resource Person**Constant Strivastava

Associate Professor

#### **Coordinators & Resource Persons**

Dr. Anupriya Kaur Asso. Professor, HSS, JUIT Mob: 98169-19374 anupriya.kaur@iuit.ac.in

Dr. Puneet Bhushan Sood Asst. Professor, UBS, HPU Mob: 98160-78335 pbsud.sml@gmail.com

Dr. Sakshi Khanna Asst. Professor, HSS, JUIT

88941-86281; sakshi.khanna@juit.ac.in

#### **Contact Person:**

Dr. Amit Srivastava Associate Professor

Department of Humanities and Social Sciences Jaypee University of Information Technology Waknaghat, Solan (HP) – 173234 (INDIA) Ph: (O) – 01792-239228; Mob: 94181-09766

Email: amit.srivastava@juit.ac.in;

sriam\_2000@yahooxedhama

For further details pleased visit the bollowing link: http://www.juit.a.in/hss.coorkshop/

Last Date: Monday, 28th May, 2018

## 7TH One Week Workshop on "Tools and Techniques for Data Analysis in Management Research" June 11 - 17, 2018

Date	Time	Event	Faculty
	9.30 am - 10.00 am	Inaugural Session	
	10.00 am - 10.30 am	Welcome Tea	
	10.30 am - 12.00 pm	Distributions (Normal)	Amit
Monday 11th June,	12.00 pm - 1.00 pm	Hypothesis Testing	Amit
2018	1.00pm - 2.00 pm	LUNCH	
	2.00 pm - 3.30 pm	Sampling and Questionnaire Designing	Anupriya
	3.30 pm - 4.00 pm	TEA	
	4.00 pm - 5.30 pm	Introduction to SPSS and Descriptive Statistics	Anupriya
	9.30 am - 11.00 am	Parametric Tests	Anupriya
	11.00 am - 11.30 am	TEA	
	11.30 am - 1.00 pm	Parametric Tests Contd	Anupriya
Tuesday 12th June,	1.00pm - 2.00 pm	LUNCH	
2018	2.00 pm - 3.30 pm	Reliability Analysis, Multiple Response Analysis, Multiple	Puneet
		Dichotomy Analysis	Puneet
	3.30 pm - 4.00 pm	TEA	
	4.00 pm - 5.30 pm	Non-Parametric Tests	Puneet
	9.30 am - 11.00 am	Discriminant Analysis	Anupriya
	11.00 am - 11.30 am	TEA	
Wednesday 13th June,	11.30 am - 1.00 pm	Multidimensional Scaling	Anupriya
2018	1.00pm - 2.00 pm	LUNCH	
2016	2.00 pm - 3.30 pm	Factor and Cluster Analysis	Puneet
	3.30 pm - 4.00 pm	TEA	
	4.00 pm - 5.30 pm	Conjoint Analysis	Puneet
			(M
	9.30 am - 11.00 am	Structural Equation Modelling	Anypaya

Date	Time	Event	Faculty
Thursday 14th June, 2018	11.00 am - 11.30 am	TEA	
	11.30 am - 1.00 pm	SEM Continued	Anupriya
	1.00pm - 2.00 pm	LUNCH	
	2.00 pm - 3.30 pm	Introduction to Econometrics, Basics of Regression Analysis	Amit
	3.30 pm - 4.00 pm	TEA	
	4.00 pm - 5.30 pm	Bi-Variate Regression Analysis, Assumptions of Regression Analysis	Sakshi
	9.30 am - 11.00 am	Multi-Variate Regression Analysis with Assumptions	Sakshi
	11.00 am - 11.30 am	TEA	
Friday 15th June, 2018	11.30 am - 1.00 pm	Multicollinearity	Amit
	1.00pm - 2.00 pm	LUNCH	
	2.00 pm onwards	SHIMLA VISIT	
	9.30 am - 11.00 am	Heteroscedasticity	Amit
	11.00 am - 11.30 am	TEA	
Saturday 16th June,	11.30 am - 1.00 pm	Autocorrelation	Amit
2018	1.00pm - 2.00 pm	LUNCH	
2016	2.00 pm - 3.30 pm	Dummy Variable Regression Analysis	Amit
	3.30 pm - 4.00 pm	TEA	
	4.00 pm - 5.30 pm	Logit, Probit and Tobit Model	Amit
	9.30 am - 11.00 am	Model Specification and Diagnostic Testing	Amit
Sunday 17th June, 2018	11:00 am - 11:30 am	TEA	
	11:30 am - 12:30 pm	Model Specification and Diagnostic Testing	Amit
	12:30 pm - 1:00 pm	VALEDICTORY	



## 7TH One Week Workshop on "Tools and Techniques for Data Analysis in Management Research" June 11 - 17, 2018





# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT

JUIT/WKG/REGR/2017-18/444

February 19, 2018

### TRAINING AND MOCKDRILL ON FIRE FIGHTING

A Mock Drill and Training on Fire Fighting Equipment will be held on 21 February 2018 at 3:00 P.M. in Azad Bhawan for all Security, Maintenance, Housekeeping and Administrative staff. All are requested to be present in Azad Bhawan at the time given above.

War

## Registrar & Dean of Students

c.c.: Sh. Vijay Sharma

Sh. Manoj Kumar Sharma

Sh. Anand Prakash Khare

Chief Security Officer

Fire Consultant

Sh. Vikrant Kumar 1

Sh. Akhilesh Kumar Singh <sup>1</sup>

Sh. Vipin Rana ∽

Sh. Harinder Singh L



Date: 21 02 2018 Page TIME 1500 TO 1600the DEPARTMENT PLACE KEMPRA NAME SINO DESKY. Security INFRONT Poem Chand HSG 015 Chart Rom 2 31 AZAD Chet Gon 3 486 Ramesh BHAVAN Switt 514 -n Sulch Pal 5 4-14 6 Raginder 78 no Berkesh PEC Vijay Kr Shorona Maintenace -un 9 Plum. Kankowya Sigh -11 Med. Nursh Vijay Bhasti Elect Harish 10 Bleatrical 1) Pawan Kumar 11 -12 11-13 House Keeping -13 H/K Purshatom 14 Arun 14 -12-Ravi Kumar -n-15 -17-Plum Vinay -11-Sirp Keeping Vippin Kuma n- Horindar Sift 18 41/8 Mohan Kin Prajesh Kumar 20 21 -n- April 22 -11- Tailsakalh -er-23 loord. Akhilosh Kr Sigh (PSA) HSG Sfar mesh Securil 25 Helps MK Ansari (F85) 5A1SIMPL PIPE CONSULTANT

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

JUIT/WKNG/REGR/2017-18/

Date: 22nd May, 2018

## TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Mock Drill and Training on Fire hydrant Systems will be held on 28<sup>th</sup> May, 2018 at 1500hrs in Annapurna FH2 for all Security, Maintenance, House Keeping, Administrative Staff, Drivers and Annapurna staff. All personnel will be present in Annapurna FH2 at the time given above:

Mon

Maj Gen. Rakesh Bassi, SM (Retd.) Registrar & Dean of students

#### Copy to:

- Registrar Office
- Maintenance
- ➤ Fire Officer
- Security Officer
- Housekeeping Incharge
- > Contractor (Sh. Duli Chand)
- Contractor (Sh. Dalip Singh Yadav)
- Contractor (Sh. Anwar Ahmad Khan)
- Mess Incharge



From: harish.changotra/Juit

 $har ish. changotra/Juit@juit.ac.in,\ tirathar aj.singh/Juit@juit.ac.in,\ hemant.sood/Juit@juit.ac.in,\ sudhir.syal/Juit@juit.ac.in$ To:

harish.changotra/Juit@juit.ac.in, sudhir.syal/Juit@juit.ac.in, jata.shankar/Juit@juit.ac.in, saurabh.bansal/Juit@juit.ac.in, gunjan.goel/Juit@juit.ac.in, jitendraa.vashistt/Juit@juit.ac.in, ponam.sharma/Juit@juit.ac.in, udayabanu.m/Juit@juit.ac.in, narendra.kumar/Juit@juit.ac.in, baleshwar.shukla/Juit@juit.ac.in, ravikant.sachan/Juit@juit.ac.in, ismail.siddiqui/Juit@juit.ac.in, mamta.mishra/Juit@juit.ac.in, sonika.gupta/Juit@juit.ac.in, somlata.sharma/Juit@juit.ac.in Cc:

Date: Friday, August 03, 2018 12:41PM

Subject: Re: Lab Staff Training

Dear All

Review of the Lab Staff Training would be conducted tomorrow (August 04, 2018) at HOD room at 9:15 AM. Lab staff members are requested to bring the report of the training along with them. Drs. Sudhir, Harish, Tiratharaj and Hemant are the members of this review committee

Harish

Harish Changotra, Ph.D. Associate Professor Department of Biotechnology, Jaypee University of Information Technology, Solan - 173 234 Himachal Pradesh, India

-----harish.changotra/Juit wrote: ----

To: harish.changotra/Juit@juit.ac.in From: harish.changotra/Juit Date: 06/02/2018 11:20AM

Cc: sudhir.syal/Juit@juit.ac.in, jata.shankar/Juit@juit.ac.in, saurabh.bansal/Juit@juit.ac.in, gunjan.goel/Juit@juit.ac.in, jitendraa.vashistt/Juit@juit.ac.in, poonam.sharma/Juit@juit.ac.in, udayabanu.m/Juit@juit.ac.in, narendra.kumar/Juit@juit.ac.in, baleshwar.shukla/Juit@juit.ac.in, ravikant.sachan/Juit@juit.ac.in, ismail.siddiqui/Juit@juit.ac.in, mamta.mishra/Juit@juit.ac.in, sonika.gupta/Juit@juit.ac.in, somlata.sharma/Juit@juit.ac.in Subject: Re: Lab Staff Training

Dear Technical Staff, Please stay in touch with your supervisor with respect to the lab. training. Thanks, Harish

Harish Changotra, Ph.D. Associate Professor Department of Blotechnology, Jaypee University of Information Technology, Solan - 173 234

Himachal Pradesh, India

----harish.changotra/Juit wrote: ----

To: sudhir.syal/Juit@juit.ac.in, jata.shankar/Juit@juit.ac.in, saurabh.bansal/Juit@juit.ac.in, gunjan.goel/Juit@juit.ac.in, jitendraa.vashistt/Juit@juit.ac.in, poonam.sharma/Juit@juit.ac.in, udayabanu.m/Juit@juit.ac.in, narendra.kumar/Juit@juit.ac.in
From: harish.changotra/Juit
Date: 05/18/2018 12:47PM

Cc: baleshwar.shukla/Juit@juit.ac.in, ravikant.sachan/Juit@juit.ac.in, ismail.siddiqui/Juit@juit.ac.in, mamta.mishra/Juit@juit.ac.in, sonika.gupta/Juit@juit.ac.in, somlata.sharma/Juit@juit.ac.in Subject: Lab Staff Training

Dear all,
As per regular practice regarding training of the technical staff, followings are the titles of training and names of the supervisors for this summer semester break.
Baleshwar – Microbial techniques and hands-on training on GC and AS – Dr. Sudhir Syal
Ravikant – Basic techniques in inolecular biology and handling of PCR – Dr. Jata Shankar
Ismail – Laboratory techniques in bioprocess technology and handling of fermenter and HPLC – Dr. Saurabh Bansal/ Dr. Gunjan Goel
Mamta Mishra – Quantitative analysis of biomolecules and spectrophotometer handling – Dr. Jitendraa vashistt
Sonika Gupta – Basic practicals in thermodynamics and chemistry – Dr. Poonam/ Dr. Udayabanu
Somlata – Hands-on training on AMBER – Dr. Narendra Kumar
As per instructions from the registrar's office, properly written training report should be submitted that would be included in Academic and Executive Council Meetings as well as for Regulatory Body inspections as reporting item.
List of the experiments to be performed in the training program is available with the supervisors.
Thank you,

Thank you, Harish

larish Changotra, Ph.D Associate Professor Department of Biotechnology, Jaypee University of Information Technology, Solan - 173 234

nachal Pradesh, India



## **Faculty Development Program**

## **Department of Civil Engineering**

14 – 19 January 2019

A six days Faculty development program on 'advances in civil engineering' was organized by the department of Civil Engineering along with CEC from 14-19th Jan, 2019. The Faculty development program (FDP) was conducted mainly for the advancement in civil engineering and to improve the performance of the civil engineering faculty members in various fields especially, in technical fields. It was conducted so that the faculty members can get more familiar and skilled in the latest technologies, helps them to find work balance by interacting with the industrial expert, and helps one to explore newer way of learning, and innovative methodology of teaching.

The program was chaired by Prof. Ashok K Gupta, HOD, CE, Dr. Rajiv Ganguli, Associate Professor as Convener and Aakash Gupta and Anirban Dhulia, Assistant Professors were coordinated the event. The event was started with the felicitation of guest followed by few words of wisdom by Major General Rakesh Bassi, Registrar and Dean of Students. Prof. Ashok K. Gupta HOD, CE, also shared few lines highlighting the importance of conducting the program in the university. The program schedule comprised mainly of guest lecture from Prof. S.K. Singh on the topic 'Management of Coal Ash: Utilization and Disposal Effects' and various other important lectures by faculty members of department of civil engineering. On each day, the program started at 10 am in the morning till 5pm in the evening with lectures by different professors on different topics stressing on the advancement in the fields of civil engineering.

The program ended with the detailed lecture by Prof. A.K. Gupta on the topic the vision for civil engineering in 2025. Lastly the day ended with the awarding of the certificates to the participants.



## One week Staff Training Program on "Introduction to Computer" using ICT content provided by Spoken Tutorial project from IIT Bombay.

Applications were invited for staff training in Introduction to Computers. Total of 35 applications were received and 18 are shortlisted based on their basic education and relevancy of the proposed course. Staff Training Program held from 11<sup>th</sup> Feb. 2019 to 15<sup>th</sup> Feb. 2019 with a daily class and hands-on session.

Dr. Rajinder Sandhu and Mr. Parteek from CSE/IT department coordinated the STP. Mr. Shiv Kumar Gupta (Sr. Lab Engg.), Mr. Rohit (Lab Engg.) and Mr. Ashok Kishtwal (Sr. Lab Engg.) act as training members for smooth conduct of STP.







## RECENT TRENDS ON MACHINE LEARNING FOR SIGNAL PROCESSING (RTMLS)

#### **REPORT**

Department of Electronics and Communication Engineering organized a 1week Faculty Development Program on "**RECENT TRENDS ON MACHINE LEARNING FOR SIGNAL PROCESSING** (RTMLS)". The program was scheduled from May 20 – 25, 2019 at Jaypee University of Information Technology, Waknaghat, Solan, H.P. Dr. Neeru Sharma, Dr. Meenakshi Sood and Dr. Shruti Jain were the Conveners of the program.

The program was inaugurated by Prof. Samir Dev Gupta, Prof. M. J. Nigam, HOD ECE Department and Dr. Mohd. Wajid, AMU, Aligarh.

More than 35 faculty members from various universities / institutes, 14 Research scholars have participated in this FDP.

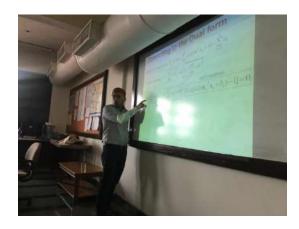






#### **Expert Lectures:**

a) *Dr. Mohd. Wajid*, Dept. of Electronics & Communication Engg Aligarh Muslim University: **SUPPORT VECTOR MACHINE and LATEX** 





b) *Dr. Ayodeji Salau*, Dept. of Electrical/Electronics and Computer Engineering, Afe Babalola University, Ado-Ekiti, Nigeria: **IMAGE FUSION AND ITS ROLE IN TECHNOLOGICAL DEVELOPMENT** 





c) *Prof. D. Ghosh*: Dept. of Electronics & Communication Engg, IIT Roorkee DEEP LEARNING: EXPLORING THE POWER OF DEPTH FOR FEEDFORWARD NEURAL NETWORKS







d) *Dr. Jitendra Virmani* , CSIR-CSIO, Chandigarh : **TRANSITION FROM MACHINE** LEARNING TO DEEP LEARNING: A CHARACTERIZATION APPROACH

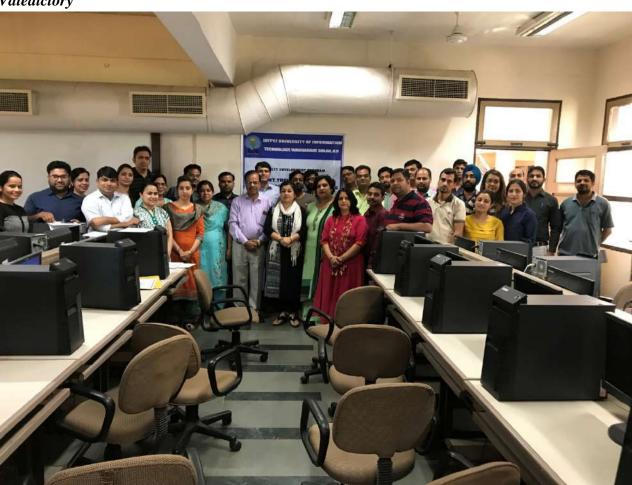








## Valedictory





#### **National Workshop**

## **BIOINFORMATICS AND BIOMEDICAL IMAGE ANALYSIS (NBBIA) – 2019**

May 29 – 31, 2019

A national level workshop on Bioinformatics and Biomedical Image Analysis NBBIA-2019 was conducted under the aegis of Centre of Excellence in Healthcare Technologies and Informatics (CEHTI), JUIT. CEHTI was established by a decision from the Academic Council in its meeting held on 2nd Dec., 2017. This CoE is being developed to identify and use recent developments in the health care sectors along with its coordination with the rapidly developing informatics techniques. Dr. Tiratha Raj Singh is being designated as the coordinator of CEHTI. The Centre aims to carry out training activities that are concentrated in the field of

includes Shoolini and Nauni Universities, Solan, Central University Dharmashala, and IHBT Palampur along with some participants from Allahabad, Jalandhar, Dehradun, Delhi, Kolkata and Chennai. Workshop was focused on basic to advanced techniques in Bioinformatics, Biomedical Image and Signal Processing and their applications to gain insights towards their real life applications. First day was dedicated to bioinformatics and biological sequence analysis. Second day focused on structural bioinformatics. Last day was on biomedical image and signal processing. All three days participants enjoyed interactive lectures and











health information of national importance and strategic dimensions. NBBIA 2019 is the outcome of such activities of CEHTI.

In NBBIA 2019, participants were from all parts of India which includes Himachal region which

hands on sessions of the respective topics. Participants were very happy and gave very positive feedback for the workshop. This workshop was jointly coordinated by Dr. Nishant Jain and Dr. Tiratha Raj Singh.



12/16/21, 3:53 PM JUIT

### 8<sup>th</sup> One Week Workshop on Tools and Techniques for Data Analysis in Management Research *June 10 - 16, 2019*

#### Department of Humanities and Social Sciences Jaypee University of Information Technology

Home Descrive For Whom Topics Pedagogy Softwares to be Used Programme

Fee Mode of Payment Last Date Organizers About the University How to Reach Contact Person Registration Form Workshop@2012 Workshop@2013 Workshop@2014 Workshop@2015 Workshop@2016 Workshop@2017 Workshop@2018



## **About the Workshop**

The field of management/social sciences research is very dynamic and evolving at a rapid pace. One has to be updated with the latest tools and techniques of data analysis for the meaningful research in the area of management/social sciences. Generating data is not a big problem but interpreting the information hidden in the data is a challenging task and it will become simplified if one has the knowledge of using the right tools and techniques for analyzing the data. It will not only provide a better result but also contribute significantly to the knowledge base and hence be useful for researchers as well as to the society. The job is simplified with the help of softwares therefore it is imperative for a researcher to know which software will be suitable for his/her research and how it should be used.

After conducting the seven successful workshops and training more than 150 participants, the Department of Humanities and Social Sciences is organizing the eighth Workshop on the topic mentioned above. The Workshop is designed for Practicing Managers, Faculty members and research scholars in the field of management/social sciences as well as to any other person who is interested in conducting research using Data Analysis for his/her area of specialization.

Since the research is best learned by hands-on, therefore the Workshop emphasizes on a "DO-IT-YOURSELF" approach. In the Workshop, the participants have to participate actively to understand different tools and techniques used in modern day management/social sciences research. The Workshop will definitely enrich the participants and help them understand their research problems with different perspectives and from different dimensions.

www.juit.ac.in

#### **Short Term Course**

on

# Recent Advances in Signal & Image Processing

24<sup>th</sup> - 28<sup>th</sup> JUNE, 2019



### Organized by

**Department of Electronics & Communication Engineering** 

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT, SOLAN (H.P), PIN-173234

(Near to Shimla)

## PROGRAMME COMMITTEE CHIEF PATRONS

- Shri Jaiprakash Gaur Ji, Founder Chairman, Jaypee Group
- Shri Manoj Gaur Ji, Executive Chairman Jaypee Group, and Pro-Chancellor, JUIT, Waknaghat, H.P.

#### **PATRONS**

- Prof. Vinod Kumar, Vice Chancellor, JUIT, Waknaghat, (H.P.)
- Prof. Samir Dev Gupta, Director and Academic Head, JUIT, Waknaghat, (H.P.)

#### **PROGRAMME CHAIR**

Prof. M. J. Nigam,
 Head of the Department, Electronics and Communication
 Engineering (ECE), JUIT, Waknaghat, (H.P.)

#### COURSE CO-ORDINATORS

- Dr. Nafis Uddin Khan, Assistant Professor, ECE
- Dr. Sunil Datt Sharma, Assistant Professor, ECE

#### **CONTACT INFORMATION**

- Dr. Nafis Uddin Khan, Mobile No. 9827306589
   E-mail: nafisuddin.khan@juit.ac.in
- Dr. Sunil Datt Sharma, Mobile No. 9826868418
   Email: <a href="mailto:sunildatt.sharma@juit.ac.in">sunildatt.sharma@juit.ac.in</a>,
   <a href="mailto:sdsharma.juet@rediffmail.com">sdsharma.juet@rediffmail.com</a>

#### **ABOUT UNIVERSITY**

Jaypee University of Information Technology (JUIT) was set up by Act No. 14 of 2002 vide Extraordinary Gazette notification of Government of Himachal Pradesh dated May 23, 2002 and it is approved by UGC under section 2(f). The University located in serene, calm and dense forestry surroundings of lower Himalayas near to Shimla and it is governed by non-profit charitable trust of **Jaypee Seva Sansthan**. The University is accredited by NAAC, NBA and its NIRF ranking is among top 100 engineering institutes including IITs, NITs and Central Universities.







IQAC

#### ABOUT DEPARTMENT

Department of Electronics and Communication Engineering is providing high quality, self motivated, creative, ethical engineers and technologist contributing effectively to universal science and contemporary education. Department is accreditated by NBA and most of the faculty members in the Department are Ph.D degree holders. ECE Department is well equipped with latest laboratories, name of few are Wireless Sensor Network & IOT, Digital Signal Processing, and Embedded Systems & Robotics. Also, it has the latest software of LABVIEW, MATLAB, and VIVADO. Presently, the Department is offering UG, PG, and Ph.D degree programs in Electronics and Communication Engineering with excellent placement records.

#### **OBJECTIVE OF THE COURSE**

The short term course has been intended to introduce recent advances in the area of Signal and Image Processing Techniques with their Real Time Applications. The goal of the course is to provide a forum to exchange latest research ideas, and innovations in the field of Signal and Image Processing. This course would surely help and offer opportunities to the new researchers. academicians, and industry professionals to enhance the knowledge and pursue research in this area.

#### **TOPICS COVERED**

The following topics would be covered with lab sessions but not limited to

• Statistical Signal Processing

- Image and Video Processing
- Genomics Signal Processing
- **Biomedical Signal Processing**
- Signal Processing for Machine Learning

#### **RESOURCE PERSONS**

Prof. Vinod Kumar (Vice-Chancellor, JUIT, Waknaghat)

Prof. Rajiv Saxena (Vice-Chancellor, JU, Anoop Shahr)

Prof. Sumantra Dutta Roy (IIT, Delhi)

Prof. Sanjeev Narayan Sharma (SATI, Vidisha)

Dr. Pyari Mohan Pardhan (IIT, Roorkee)

Dr. Meenakshi Rawat (IIT Roorkee)

Dr. Dileep A. D. (IIT Mandi)

#### WHO CAN ATTEND

Faculty/Research Scholars/Industry Professionals from the field of Electronics & Communication Engineering, Electronics & Instrumentation Engineering, Computer Science Engineering & IT, Electrical Engineering, Biomedical Engineering and Bio-Informatics can attend this course.

#### **REGISTRATION FEE**

- Registration fee for the course is INR 3000/- per participant with residential accommodation and INR 2000/- per participant without residential accommodation.
- The registration fee includes breakfast, lunch and dinner for all residential participants and only lunch for non-residential participants. The registration fee also includes tea & snacks and programme kit for all the participants.

IQAC

#### REGISTRATION

- The participants may register through following google link. https://forms.gle/tm6EjKW73hQfTibG7
- The participants may also register by sending the duly filled registration form through E-mail.
- The registration fee can be remitted through online transfer as per details given below:

Bank Name: Punjab National Bank

Branch Address: Waknaghat Branch, Jaypee University of

Information Technology, Waknaghat **Account No.**: 0427032100000010

**IFSC Code**: PUNB0637100 **MICR Code**: 171024077

- The maximum intake for this course is 30 and registration will be confirmed on FIRST-COME-FIRST-SERVE basis.
- If the registration is not confirmed by programme committee, then the registration fee will be refunded.
- There is no refund in case of the cancellation of confirmed registration.
- The last date for the registration is May 31, 2019.

#### **HOW TO REACH**

The JUIT Waknaghat is located 3 kms from National Highway NH-22 (Chandigarh - Kalka - Shimla). The nearest railway stations are Chandigarh and Kalka. The distance from Chandigarh and Kalka is about 90 kms and 75 kms respectively from JUIT. The frequent bus and taxi services are available from Chandigarh and Kalka railway stations to reach JUIT.

#### **REGISTRATION FORM**

# Short Term Course on Recent Advances in Signal & Image Processing

24th - 28th JUNE, 2019

Name: Mr./Ms./Dr
Designation:
Organization:
Address for Communication: .
Mob.No
E-mail:
Mode of Payment (NEFT/RTGS):
Payment Details:
Reference No. (NEFT/RTGS )
Date:
Amount:
Accommodation required (Yes/No):
Signature:
Signature: IQAC IQAC

#### Short Term Course on Recent Advances in Signal and Image Processing

#### June 24 – 28, 2019

# Department of Electronics and Communication Engineering Jaypee University of Information Technology, Waknaghat, India

#### Venue- CR-7, (First Floor, Academic Block)

Time	9:30 am -10:15 am	10:15 am-10:45am	11:00am-1:00pm	1:00pm-2:00pm	2:00pm-4:00pm
Day 1 (24/06/2019)	Inauguration	High Tea	"FrFT: Fragrant & Fantastic Tool" (Prof. Rajiv Saxena)	Lunch	Anisotropic Diffusion in Image Processing (Dr. Nafis U. Khan)

Time	10:00 am -11:15 am	11:15am-11:30 am	11:30 am-12:45 pm	12:45 pm-2:00 pm	2:00 pm-4:00 pm
Day 2 (25/06/2019)	Science of Heart Rate Variability (HRV) (Prof Vinod Kumar)	Tea Break	Science of Heart Rate Variability (HRV) (Prof Vinod Kumar)	Lunch	Extraction of Features for Classification of Abnormalities in Bio-medical Images (Dr. Nishant Jain)
Day 3 (26/06/2019)	Basic Image Data Analysis using Python Programming (Dr.Yugal Kumar)	Tea Break	Machine Learning Technique for Human Health Care System (Dr. Pardeep Kumar)	Lunch	Predictive Computing Techniques and Applications (Dr. Pradeep Kumar Gupta)
Day 4 (27/06/2019)	Motion Segmentation and Tracking (Prof. Sumantra Dutta Roy)	Tea Break	Motion Segmentation and Tracking (Prof. Sumantra Dutta Roy)	Lunch	Applied Research in Biomedical Image and Signal Processing (Dr. Shruti Jain)
Day 5 (28/06/2019)	Genomics Signal Processing (Dr. Sunil Datt Sharma)		Valedictory Function	Lunch	



# <u>List of key-note Speakers / Resource Persons:</u>

S. No.	Name & Designation	Research / Expertise Area	Affiliated Department and Institute (with full address)	Topic of the Lecture
1.	Prof. Vinod Kumar	Signal and Image Processing	Vice Chancellor, Jaypee University of Information Technology, Solan (H.P.)	
2.	Prof. Rajiv Saxena	Signal and Image Processing	Vice Chancellor, Jaypee University, Anoopshahr (U.P.)	FrFT: Fragrant & Fantastic Tool
3.	Prof. Sumantra Dutta Roy	Signal and Image Processing	Department of EE, Indian Institute of Technology, Delhi	Motion Segmentation and Tracking
4	Dr. Pradeep Kumar Gupta	Software Engineering and Information system	Department of CSE, Jaypee University of Information Technology, Solan (H.P.)	Predictive Computing Techniques and Applications
5.	Dr. Pardeep Kumar	Computational and Machine Intelligence	Department of CSE, Jaypee University of Information Technology, Solan (H.P.)	Machine Learning Technique for Human Health Care System
6.	Dr. Shruti Jain	VLSI Signal Processing	Department of ECE, Jaypee University of Information Technology, Solan (H.P.)	Applied Research in Biomedical Image and Signal Processing
7.	Dr. Nafis U. Khan	Signal and Image Processing	Department of ECE, Jaypee University of Information Technology, Solan (H.P.)	Anisotropic Diffusion in Image Processing
8.	Dr. Sunil Datt sharma	Signal and Image Processing	Department of ECE, Jaypee University of Information Technology, Solan (H.P.)	Genomics Signal Processing
9.	Dr. Yugal Kumar	Theory of Computation and Data Mining	Department of CSE, Jaypee University of Information Technology, Solan (H.P.)	Basic Image Data Analysis using Python Programming
10.	Dr. Nishant Jain	Signal and Image Processing	Department of ECE, Jaypee University of Information Technology, Solan (H.P.)	Extraction of Features for Classification of Abnormalities in Bio-medical Images

### Five Days Short Term Course

on

# RECENT ADVANCES IN SIGNAL AND IMAGE PROCESSING (RASIP)

June 24 - 28, 2019

#### **REPORT**

Department of Electronics and Communication Engineering organized a five days Short Term Course on "RECENT ADVANCES IN SIGNAL AND IMAGE PROCESSING (RASIP)". The program was scheduled from June 24 – 28, 2019 at Jaypee University of Information Technology, Waknaghat, Solan, H.P.

Dr. Nafis Uddin Khan and Dr. Sunil Datt Sharma were the Coordinators of the course. The program was inaugurated by Honorable Vice Chancellor Prof. Vinod Kumar and Director Prof. Samir Dev Gupta under the chief guest Prof. Rajiv Saxena, Vice Chancellor, Jaypee University, Anoopshahar. More than 30 participants from Jaypee University of Information Technology, Waknaghat and outside Jaypee University of Information Technology, Waknaghat have participated in this course. The participants include faculty members, research scholars and PG students from various universities / institutes.









Expert lectures presented by Prof. Vinod Kumar, Prof. Rajiv Saxena, Prof. Sumantra Dutta Roy (IIT Delhi), Dr. Shruti Jain, Dr. Pardeep Kumar, Dr. Pardeep Kumar Gupta, Dr. Nafis U. Khan, Dr. Sunil Datt Sharma, Dr. Yugal Kumar and Dr. Nishant Jain.



2019/6/28 09:55

AKNAGHA

# Valedictory Function



Group Photo and Tea Party





JUIT/WKNG/REGR/2017-18/

Date: 22nd August, 2018

# TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Mock Drill and Training on Fire hydrant Systems earthquakes and Disaster management drill will be held on 29th August, 2018 at 1530hrs in **H14 Azad Bhawan** for Fire Fighting Team, Isolated Team, Fire Salvage Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Administrative Staff, Drivers and Annapurna staff as well as newly joined faculty, nonteaching staff and students. All personnel will be present in H14 Azad Bhawan at the time given above:

Director

#### Copy to:

- Registrar Office
- Maintenance
- Fire Officer
- Security Officer
- > Housekeeping Incharge
- Contractor (Sh. Duli Chand)
- > Contractor (Sh. Dalip Singh Yadav)
- Contractor (Sh. Anwar Ahmad Khan)
- Mess Incharge



JUIT/WKNG/REGR/2017-18/

Date: 18th January, 2019

#### TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Mock Drill and Training on Fire hydrant Systems earthquakes and Disaster management drill will be held on 23<sup>rd</sup> January, 2019 at 1500hrs in **Near Mugal Garden** for Fire Fighting Team, Isolated Team, Fire Salvage Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Lab staff, LRC, Administrative Staff, Account Section staff, store, Electrical, Laundry, Drivers and Annapurna staff as well as newly joined faculty, nonteaching staff and students. All personnel will be present in Mugal Garden at the time given above:

Maj Gen. Rakesh Bassi, SM (Retd.)
Registrar & Dean of students

Copy to:

- Registrar Office
- Maintenance
- > Fire Officer
- Security Incharge
- > Housekeeping Incharge
- > Contractor (Sh. Duli Chand)
- Contractor (Sh. Dalip Singh Yadav)
- Khan Contractor
- Mess Incharge
- > Store
- Account Section
- Electrical
- > Laundry
- Dispensary

7- be held an of falls in

November 21/1.



!UIT/WKNG/REGR/2017-18/

Date: 04th February, 2019

#### TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Mock Drill and Training on Fire hydrant Systems earthquakes and Disaster management drill will be held on 05th February, 2019 at 1500hrs in **Near Mugal Garden** for Fire Fighting Team, Isolated Team, Fire Salvage Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Lab staff, LRC, Administrative Staff, Account Section staff, store, Electrical, Laundry, Drivers and Annapurna staff as well as newly joined faculty, nonteaching staff and students. All personnel will be present in Mugal Garden at the time given above:

War

Maj Gen. Rakesh Bassi, SM (Retd.) Registrar & Dean of students

#### Copy to:

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- > Fire Officer
- Security Incharge
- > Housekeeping Incharge
- > Contractor (Sh. Duli Chand)
- Contractor (Sh. Dalip Singh Yadav)
- > Khan Contractor
- Mess Incharge
- > Store
- > Account Section
- > Electrical
- Laundry
- Dispensary



JUIT/WKNG/REGR/2017-18/

Date: 14th March, 2019

#### TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Mock Drill and Training on Fire hydrant Systems earthquakes and Disaster management drill will be held on 19<sup>th</sup> March, 2019 at 1500hrs in **Near H-14 Azad Bhavan** for Fire Fighting Team, Isolated Team, Fire Salvage Team, Fire Technical Team, and Medical Team.

1. Fire Fighting Team:-

I/C SI Kunwar Singh

Security Staff=14

Water Tanker Drive=04 Housekeeping=06

2. Fire Isolation Team:

I/C Jr. Coordinator, Manjeet Kumar, Supervisor

Sunil Kumar

Mess Staff & Helper=09

3. Fire Salvage Team:

I/C Supervisor Dharam Pal Swift Security

Personal=08 Swift

4. Technical Team:

I/C Contractor Sh. Duli chand

Maintance Staff=11

Electrical Staff=02 (Supervisor, Parma Nand,

Electrician, Vipin Kumar)

5. **Medical First aid Team:** I/C Nursing Asst., Dasa Ram, Vijay Bharti, Ambulance Driver

As per Fire SOP all present H-14 Azad Bhawn at the Time mentioned above.

M

Maj Gen. Rakesh Bassi, SM (Retd.) Registrar & Dean of students

#### Copy to:

- Security Incharge (SI Chint Ram)
- > Sr. FE (Vijay Sharma)
- Manager (D.S. Rawat, Mess I/C)
- Electrical (A.P.Khare)
- > Supervisor (Dharam Pal)
- > Dispensary
- Admin Coordinator (Akhilesh Kr. Singh)
- > Mr. Dilbag Singh



JUIT/WKG/REGR/2019-20/

28 May 2019

#### TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Mock Drill and Training of Fire hydrant systems earthquakes and Disaster management drill will be held on 28 May, 2019 at 1530hrs near Azad Bhawan (H-14) for Fire Fighting Team, Isolated Team, Fire Salvage Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Lab staff, LRC, Administrative, Account Section, Store Electrical, Laundry, Drivers, Annapurna staff as well as Teaching, Non-teaching staff and students. All personnel will be present in near Azad Bhawan (H-14) at the time given above:

Man

Maj Gen Rakesh Bassi, SM (Retd.) Rregistrar & Dean of Students

#### Copy to:

Admn Office

Maintenance

Fire Office

Security Incharge

Housekeeping Incharge

Contractor (Sh. Duli Chand)

Contractor (Sh. Dalip SinghYadav)

Khan Contractor

Mess Incharge

Electrical

Laundry

Dispensary

Horticulture





# Fw: Invitation to attend NPTEL Workshop at JUIT in association with IIT, Roorkee (Registration Free) TA will be Reimburse upto 100 Km @ Rs 12 Per Km by Car

1 message

saurabh.bansal@juit.ac.in <saurabh.bansal@juit.ac.in>To: nishant.jain@juitsolan.in

4 June 2023 at 12:42

----Forwarded by saurabh.bansal/Juit on 06/04/2023 12:42PM ----To: juit\_all@juit.ac.in
From: pradeep.ksingh/Juit
Date: 05/31/2019 03:58PM

Cc: all\_faculty@juit.ac.in, all\_hod@juit.ac.in

Subject: Invitation to attend NPTEL Workshop at JUIT in association with IIT, Roorkee (Registration Free) TA will be Reimburse upto 100 Km @ Rs 12 Per Km by

Car

(See attached file: Schedule of NPTEL workshop @ Jaypee Solan.docx)

To.

Faculty Members and Staff Members of JUIT

Subject: Invitation to attend NPTEL Workshop at JUIT in association with IIT, Roorkee

Dear Madam/Sir.

Greetings of the season!!

We are pleased to inform you that IIT Roorkee is going to organize a workshop on the awareness of National Programme on Technology Enhanced Learning (NPTEL) at Jaypee University of Information Technology (JUIT), Waknaghat, Solan (H.P.) for all institutes who would like to be benefitted by NPTEL.

NPTEL project under MOOCs is, a project of MHRD, created to provide quality education to anyone interested in learning from the IITs and IISc. Students acquire the essential skills that underpin the crux of the subjects through NPTEL courses.

UGC and AICTE have approved that to allow MOOC courses up to 20% for credit in their Gazette notification of August 2016. These courses are being used by students to avail internship opportunities and prepare for the GATE exam too. About 15-20% of NPTEL participants are faculty members from various colleges and hence these programmes are also helping in faculty development and improvement. The advanced courses are recognised by AICTE as Faculty Development Programme.

You are requested to kindly send two to four faculty members to attend the workshop to create maximum awareness about this mission of MHRD, Govt. of India among the faculty members and students of your esteemed organization.

Date of the Workshop: 15 June 2019 (Saturday)

Venue: Jaypee University of Information Technology, Waknaghat, Solan (H.P.)

Time: 09:00 AM - 1:00 PM to be followed by lunch

#### **Travel Reimbursement Rules:**

Travel fare will be reimbursed **only** with the submission of tickets. This is **mandatory**.

Original onward train ticket / bus ticket / Taxi fare ticket and photocopy of return ticket should be provided for travel reimbursement.

Only round trip fare from the participant's institution to your institution will be reimbursed. **Maximum permissible distance** (one way) for reimbursement is 100km (unless prior approval is sought from the concerned IIT).

Bus Travel: For local participants, bus fare from/to city will be reimbursed.

Using personal car: Participants travelling by their own car should remit a copy of their RC copy book and should declare the distance travelled. They will be paid Rs. 12/km.

Using Travel Cab: The original bill as charged by the travel services should be submitted for reimburstener

Travel by Train: For those travelling by train, the reimbursement will be equivalent to the II A train fares from the participant's city to the city of the host institute.

Local Conveyance: Local conveyance (railway / bus station to venue of workshop) will be reimburgated on production of taxi/auto receipt.

For accommodation (if possible) on payment basis; Dr. Pradeep Kumar Singh, Assistant Professor, Department of Computer Science & Engineering, Jaypee University of Information Technology, Waknaghat, Solan (H.P.) can be contacted on +91-9816627732.

Following is the **Google link for the registration**:

 $\underline{https://docs.google.com/forms/d/e/1FAIpQLScPdOqLkyNul8WpoYtY4e0KnKCPARaFkmtYQQNn3Jnk1o9lLw/viewform?}\\ \underline{usp=pp\_url}$ 

We solicit your presence in making this workshop a success.

Thanking you, Yours sincerely, Namita Das Project Associate NPTEL (Local Chapter) E-Learning Centre IIT, Roorkee

Cell: +91 8077643022

www.nptel.ac.in

COPY OF SCHEDULE IS ATTACHED.

With Warm Regards Dr. Pradeep Kumar Singh Senior Member ACM, CSI Mobile-+91-9816627732

Schedule of NPTEL workshop @ Jaypee Solan.docx 14K



# Jaypee University of Information Technology, Waknaghat, HP-173234, India

# Lab Staff Training during Summer Vacation Break Dept of Biotechnology and Bioinformatics

List of Lab Staff members: Mr.Baleshwar (BT), Mr.Ismail(BT), Ms.Sonika (BT), Ms.Mamta (BT), Ms. Somlata (BI)

Tentative schedule of Training (week wise):

Week	List of Staff Members	Responsible Faculty	Training Domain
1 <sup>st</sup> (June 3, 2019- June8,	Mr. Baleshwar & Ms. Mamta	Dr Rahul Srivastava	Microbial Culture Collection Maintenance
2019)	Mr. Ismail	Dr. Hemant Sood	Tissue Culture Techniques
	Ms. Sonika	Dr. Jata Shankar	PCR and Real Time PCR
	Ms. Somlata	Dr. Tiratha Raj Singh	Virtual Screening, docking and Simulation studies
2 <sup>nd</sup> (June 10, 2019- June	Mr. Baleshwar & Ms. Mamta	Dr Rahul Srivastava	Microbial Culture Collection Maintenance
15, 2019)	Mr. Ismail	Dr. Hemant Sood	Tissue Culture Techniques
	Ms. Sonika	Dr. Jata Shankar	PCR and Real Time PCR
	Ms. Somlata	Dr. Tiratha Raj Singh	Virtual Screening, docking and Simulation studies
3 <sup>rd</sup> (June 17, 2019 – June 22, 2019)	Mr. Baleshwar Ms. Mamta Mr. Ismail Ms. Sonika Ms.Somlata	Computer faculty	Computers- Basics and programming
4 <sup>th</sup>	Mr. Baleshwar & Ms. Mamta	Dr Rahul Srivastava	Microbial Culture Collection Maintenance
(June 24, 2019- June 29, 2019)	Mr. Ismail	Dr. Hemant Sood	Tissue Culture Techniques
	Ms. Sonika	Dr. Jata Shankar	PCR and Real Time PCR
	Ms. Somlata	Dr. Tiratha Raj Singh	Virtual Screening, docking and Simulation studies

(Dr. Anti Kant, BJ & Bl Member)

(Dr. Garlapati Vijay Kumar, BT & BI Member)

01/06/2019

IQA

21/06/2019

#### **REGISTRATION FORM**

# Emerging areas of Research in Image Processing (ERIP)-2020

Name:
Designation:
Qualification:
Department:
Organization:
Mobile:
Email:
Amount:
DD/UTR No.:Date
Bank drawn:

#### Signature of the candidate

#### **Registration Fees**

Registration (without accommodation & food): ₹ 1000
Registration with accommodation & food: ₹ 2500
Payment can be done through DD/NEFT
Participants can register by sending the duly filled registration form along with registration fee payment details at: nishantjain86@gmail.com.

Details for payment of Registration fees are:

Account No.: 0427002100682105

Beneficiary: Jaypee University of Information Technology,

Waknaghat

IFS Code: PUNB0042700

Punjab National Bank, THE MALL, SHIMLA (H.P)

#### **Patrons**

Prof. (Dr.) Vinod Kumar Vice-Chancellor

**Prof. (Dr.) Samir Dev Gupta** 

Dean Academic & Research

# **Program Chair**

Prof. (Dr.) M. J. Nigam

**HoD, ECE Department** 

Dr. Shruti Jain

Assoc. Prof., ECE Department

#### **Finance Chair**

Maj. Gen Rakesh Bassi (Retd.)

**Registrar and Dean of Students** 

#### **Conveners**

Dr. Nishant Jain Dr. Emjee Puthooran

#### **Coordinators**

Dr. Harsh Sohal Ms. Pragya Gupta

#### **Contact:**

01792-239205, 7895451577 nishantjain86@gmail.com, nishant.jain@juit.ac.in



# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

WORKSHOP on

# EMERGING AREAS OF RESEARCH IN IMAGE PROCESSING-2020 (ERIP-2020)

Jan 06 – 12, 2020



Organized by:

OF INFORMATION CONTROL

OF INFORMATION

#### **About JUIT**

JUIT is spread over 25 acres of lush green picturesque slopes of Waknaghat, in district Solan of Himachal Pradesh, creating a tranquil environment that can heighten the spirit and energy level of all learners and inspire them to optimize their learning efforts.

JUIT Waknaghat is midway between Shimla & Solan. Shimla is 24 Kms from the campus. Kalka is the nearest broadgauge railway station. Waknaghat is very well connected with buses from Delhi, UP, Haryana, Punjab, Rajasthan and Chandigarh/Kalka.

#### **About the Department**

The Department of Electronics and Communication Engineering was established in the year 2002 with undergraduate program. Susequently, M.Tech and Ph.D programs were started by the department. The department is playing a vital role in producing competent engineers of highest caliber with emphasis on technical skills, critical thinking and problem-solving. The department has highly motivated and learned faculty who are research oriented and working on cutting edge technologies. The faculty of the department is actively involved in research areas namely Signal & Image Processing, Embedded System and VLSI, RF and Microwave Antenna, Communication and Networking, and Automation and Control to focus on research in advanced trends and applications in these fields. The department has produced 23 doctorates and currently 18 research scholars are working in different research areas.

#### **Objective of the Workshop**

Image Processing finds its application in the areas such as biomedical engineering, forensic science, remote sensing, agriculture, and many more. Due to very wide area of applications, it

attracts students, researchers, educators and industrialist from different background like Electronics and Communication Engineering, Computer Science Engineering, Biotechnology and Bioinformatics Engineering and others. This workshop will help the participants working or intend to work in the area of biomedical engineering, forensic analysis, remote sensing, telemedicine, etc. It will help the participants to explore new dimensions for their academic and research activities.

#### The objectives of the workshop are:

- To provide knowledge on the recent developments in the areas of biomedical engineering, forensic analysis, remote sensing images and telemedicine
- To provide hands-on practice on image processing and analysis of biomedical images using MATLAB
- To make aware participants about the requirements of industries on Image Processing
- To make aware participants about the requirement of software tools for analysing medical images

## **Eminent Speakers**

## **Experts from Industries/Academia**

- Dr. Vinod Kumar
   Vice-Chancellor, JUIT
   (former Deputy Director, IIT Roorkee)
- Dr. Zahir Ahmed Ansari Scientist, IRDE (DRDO)
- Mr. Ankur Jain Founder & CEO at UdyogYantra Technologies
- Dr. Narendra Digambar Londhe

  Head, Electrical Engineering Deptt., NIT Raipur
- Dr. Arvind Kumar Professor, PIET, Gujarat
- Dr. Meenakshi Sood

  Associate Professor, NITTTR, Chandigarh
- Dr. Jitendra Virmani
   CSIR-CSIO Chandigarh
- Dr. Dinesh Kumar
   Asst. Professor, ECE Deptt., Thapar University



Three days workshop on

# Perception towards IPR

February 10 -12, 2020

IPR Cell JUIT organized a three day workshop on "Perception towards IPR" in collaboration with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE) from February 10-12 2020.

Details of the events of workshop are:

- ➤ 10 Feb 2020 Survey and Data Analysis of IPR from the faculty/staff members and students
- ➤ 11 Feb 2020 Survey on Gl'S , copyright in & around JUIT and Himachal Pradesh
- ➤ 12 Feb 2020 Guest Lecture by Dr. Sunderesha S and Dr. Rajender Singh from CPRI Shimla



On the first day; IPR Survey was done with in JUIT faculty and staff members. A survey form was designed by Mr. Shailu Srivastava (Student Coordinator IPR team) seeking information related to IPR and patents.

On the second day (February 11, 2020) survey continued. Proposed GIs entries were also





submitted by the students of B.Tech and M.Sc. their potential was judged by a team composing Mr. Shashi Dhar (HIMCOSTE), Prof. Sudhir Kumar

(Coordinator IPR), Dr.Shruti Jain (Co-Coordinator IPR), and Mr. Shailu Srivastava (Student Coordinator IPR).

On third day Resource persons from CPRI Shimla; Dr. Sunderesha S and Dr. Rajender Singh, Scientist Division of Plant Protection had given lectures related to IPR and patents. They highlighted the



process of IPR followed in CPRI and about their patents and their commercialization. Prof. Vinod Kumar (Hon'ble Vice Chancellor JUIT) facilitated the resources persons and addressed the gathering.

For the GI competition, 18 entries were received and from these top three GIs chosen on the basis on tradability and novelty. The details of the winners are:

Prize	Roll No.	Name	Proposed GI
1 <sup>st</sup>	171350	Aditya S Gangwar	Angoori
2 <sup>nd</sup>	171008	Sanket Saxena	Kotgarh Apple
3 <sup>rd</sup>	171359	Kirti Varma	Charmaa (Berry)

Winner received certificate and a cash prize of Rs.3000, Rs.2000 and Rs.1000 as 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, respectively from resource person Or. Sundaresha and IPR cell Co-coordinato: Dr. Shruti Jain.

# Workshop on "Perception towards IPR"

IPR Cell JUIT organized a three day workshop on "Perception towards IPR" in Jaypee University of Information Technology in collaboration with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE) from February 10-12 2020.



Details of the events of workshop are:

Date	Events
February 10, 2020	Survey and Data Analysis of IPR from the faculty/staff members and students
February 11, 2020	Survey on GI'S, copyright in & around JUIT and Himachal Pradesh
February 12, 2020	Guest Lecture by Dr. Sunderesha S and Dr. Rajender Singh from CPRI Shimla.

On the first day; IPR Survey was done with in JUIT faculty and staff members (Form: **Appendix 1**). A survey form was designed by Mr. Shailu Srivastava (Student Coordinator IPR team) seeking information related to IPR and patents.

On the second day (February 11, 2020) survey continued. Proposed GIs entries were also submitted by the students of B.Tech and M.Sc. their potential was judged by a team composing Mr. Shashi Dhar (HIMCOSTE), Prof. Sudhir Kumar (Coordinator IPR), Dr. Shruti Jain (Co-Coordinator IPR), and Mr. Shailu Srivastava (Student Coordinator IPR).

On third day Resource persons from CPRI Shimla; Dr. Sunderesha S and Dr. Rajender Singh, Scientist Division of Plant Protection had given lectures related to IPR and patents. They highlighted the process of IPR followed in CPRI and about their patents and their commercialization. Prof. Vinod Kumar (Hon'ble Vice Chancellor JUIT) facilitated the resources persons and addressed the gathering.







IQAC

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3rd	171359	Kirti Varma	Charmaa (Berry)







Winner received certificate and a cash prize of Rs.3000, Rs.2000 and Rs.1000 as first, second and third, respectively from resource person Dr. Sundaresha and IPR cell Co-coordinator Dr. Shruti Jain.

During the Guest Lecture IPR cell coordinator Dr. Sudhir Kumar explained about the IPR cell of JUIT and briefed about the happenings of the past two days workshop. He thankfully acknowledged the financial and intellectual support provided by HIMCOSTE. He highlighted that 09 patents were granted to JUIT in past. One patent was filed through HIMCOSTE in 2019.





The workshop was ended with the vote of thanks by IPR cell co-coordinator Dr. Shruti Jain.

# जेपी यूनिवर्सिटी में वर्कशॉप का आयोजन



सोलन। जेपी यूनिवर्सिटी ऑफ इन्फार्मेशन एंड टेक्नोलॉजी वाकनाघाट में परसेप्शन टुवर्ड्स आईपीआर विषय पर आयोजित तीन दिवसीय वर्कशॉप का समापन बुधवार को हुआ। जेयूआईटी के आईपीआर सैल द्वारा आयोजित इस वर्कशॉप में सभी शिक्षक और विद्यार्थियों ने भाग लिया। वर्कशॉप के दौरान फाइंडिंग नियू जीयोग्राफिकल इंडिकेशंस ऑफ हिमाचल प्रदेश की प्रतियोगिता करवाई गई, जिसमें आदित्य सिंह गंगवार ने पहला स्थान प्राप्त किया। वर्कशॉप का समापन गेस्ट लेक्कर से हुआ, जिसमें सीपीआरआई शिमला से डा. सुंदरेशा सिंहपा ने सभी शिक्षक और छत्रों को आईपीआर के बारे में जागरूक किया। आईपीआर के को-आर्डिनेटर डा. सुधीर कुमार ने बताया कि जेयूआईटी को नौ पेटेंट्स ग्रांट हो चुके हैं जिसमें से चार पेटेंट्स 2019 में ग्रांट हुए हैं और 12 अभी प्रक्रिया में हैं। वर्कशॉप का समापन आईपीआर सैल की को-आर्डिनेटर डा. श्रुति जैन ने धन्यवाद प्रस्ताव से साथ किया।



### WORKSHOP ON "PERCEPTION TOWARDS IPR"



#### **SURVEY FORM**

### FEB 10-12, 2020

Name	:	Department:	
Employ	yee Code:	Designation:	
Mobile	No. :	Email:	
1.	Ever heard of patents: Y N	]	
2.	Do you know the difference between trademarks, pa	tents and copy	rights?
3.	Any patent you have filed: Y N		
	If (yes) give details		
4.	Are you thinking of filing your first patent?	Y	N
5.	Does this promote your economic growth?	Y	N
6.	Why do you/someone hesitate to file any patent :		
7.	Do you know about design registration and copyrigh	ıt?	
8.	Do you prefer publication or patent?		





# WORKSHOP ON "PERCEPTION TOWARDS IPR"





### FEB 10-12, 2020

# Please give a rating (4- Excellent; 3- Very Good, 2- Good, 1- Fair)

S.No.	Particulars	Rating
1	Learning value (in terms of skills, concepts, knowledge, analytical abilities, or broadening perspectives) in workshops and guest lecture related to IPR and patents	
2	How much do you think this will meet your/students academic requirement	
3	How much you satisfy by the procedure of patent filing in India.	
4	How much Geographical Indications adds value to the particular geography.	



Three days training programme on

# Training for Masons on Hazard Resistant Construction

February 25 - 27, 2020

The Disaster management and research cell (DMRC), Civil Engineering department of Jaypee University in collaboration with Himachal Pradesh District Disaster Management Authority (HPDDMA), Solan conducted a three days training program for 28 masons (from Kandaghat block), 3 Junior engineers, 2 educators from ITI solan and officials from DC office solan. Jaypee university has been chosen as a nodal center for various trainings and awareness programs conducted by HPDDMA Solan. As a first step in this collaboration on



25th February 2020, three days training program for hazard resistant construction was inaugurated by Honorable Vice chancellor Prof. Vinod Kumar, which was attended by distinguished guests from DC office solan, Kandaghat SDO office, participants from various panchayats of Kandaghat, staff and students from Civil engineering department.



During the first day of training programme participants were briefed upon how and why earthquake occurs and the need of earthquake resistant design of structures by the Chairperson DMRC Dr. Tanmay Gupta. The session also imparted knowledge upon various materials and tools used during the modern hazard resistant construction and important safety/maintenance tips. In the latter half of the day participants were given exposure to lab and site procedures for quality control of the materials. Strength testing of bricks, concrete



specimen, check for quality of cement, fine aggregate and coarse aggregates were the main highlights of the session.

Second day the focus was upon hands on training for the participants for earthquake resistant masonry structures and reinforced concrete framed structure. Participants came to



know regarding various masonry building schemes such as English bond, Flemish bond, Rat-trap bond via practical demonstration and themselves building these schemes. Furthermore, based on latest Indian codal provisions, the importance of earthquake resistant band and their proper ductile detailing of reinforcement were discussed, demonstrated and practiced.

Dr Saurav, Chairperson DMRC addressed the participants on the final day briefing them upon ductile detaining of beams, columns and foundations in a reinforced concrete framed structure. He also imparted knowledge upon unconfined and confined masonry structures.







Classroom sessions were followed demonstration and hands-on practice upon reinforcement detailing. As most-commonly faced problem during earthquake or any hazard is due to lack of confinement of reinforcement, safe and economical construction practices for low cost housing and even for multi-story buildings, emphasizing on proper confinement were discussed, demonstrated and practiced. Three days training came to end on 27th February 2020, via certificate distribution. Chief guest for the closing ceremony SDM Kandaghat interacted with the participants and thanked DMRC, Jaypee university to organize and sponsor the programme.









# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT, SOLAN, HP

Department of Computer Science and Engineering & Information Technology

is organizing

# FACULTY DEVELOPMENT PROGRAMME

from

June 15<sup>th</sup> - 20<sup>th</sup>, 2020

on "TRANSFORMING EDUCATION WITH INDUSTRY 4.0"



Mechanization steam and water power



Mass Production and Electricity



Electronics and IT Systems











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# "TRANSFORMING EDUCATION WITH INDUSTRY 4.0"

Industry will age 4.0 bring in а considerable change in physical world. The way Industrial Revolution 4.0 is transforming the world, technologies like the Internet of Things (IoT), Big Data, and Artificial Intelligence (AI) are impacting major industries, and in turn, jobs. With the arrival of Industrial Revolution 4.0, it is possible that the technologies powered by AI will supersede everything. Further, it will also require the current workforce to upgrade their skills and knowledge. For this, a revolution in education is essential to enable people worldwide to harness the opportunities created by the advent of these technologies.

#### Who can attend:

- ·Industry Professionals
- ·Faculty Members
- ·Research Scholars

# Mode of Delivery of Address:

Online Platform for FDP : WebEx/ZOOM

# No Registration Fee will be charged

Registration link: https://forms.gle/Y6U1niaRjp6vCASy8

Certificates will be awarded to all participants who secure more than 70% in the online test that will be conducted at the end of FDP.

# Chief Patron

Prof. Dr. Vinod Kumar,

Vice Chancellor, Jaypee University of Information Technology, Waknaghat, Solan HP, India.

#### **Patrons**

Prof. Dr. Samir Dev Gupta, Director and Head CSE & IT, Jaypee University of Information Technology, Waknaghat, Solan HP, India.

Information Technology Waknaghat, Solan HP, India.

Jaypee University of,

Retd. Maj. Gen. Rakesh Bassi,

Registrar and Dean of students

# Convenor

Dr. Ruchi Verma, Assistant Professor (Sr. Grade) Department of CSE & IT Jaypee University Waknaghat, Solan HP, India.

# **Contact Details:**

Dr. Ruchi Verma ruchi.verma@juit.ac.in Mobile number: 973600

# **GALAXY OF SPEAKERS**



Prof.(Dr.)Lalit Awasthi
Director
NIT Jalandhar



Dr.(Mrs.) Purnima Chauhan IAS(retd.) Secretary Government of HP



Prof.(Dr.)Raj Bhatnagar
Professor
Dept. of Electrical Engineering
and Computer Science,
University of Cincinati



Prof.(Dr.) Aparajita Ojha Professor Computer Science Dept. IIITDM, Jabalpur



Prof.(Dr.)Manu Sood
Professor
Dept. of Computer Science
H.P. University, Shimla



Prof.(Dr.) R.K Sharma
Professor
Dept. of Computer Science
Thapar Institute of Engineering
and Technology, Patiala



Prof. (Dr.) Vivek Kumar Singh
Professor
Dept. of Computer Science
BHU, Varanasi



Dr. Varun Dutt,
Associate Professor
School of Computing and
Electrical Engineering,
IIT Mandi



Dr. Hitesh Shrimali
Associate Professor
School of Computing and
Electrical Engineering,
IIT Mandi



Dr.Narottam Chand Kaushal, Associate Professor Dept. of Computer Science & Engineering, NIT, Hamirpur



Dr. T.P Sharma
Associate Professor
Dept. of Computer Science
& Engineering, NIT, Hamirpur



Dr. Ashok Kumar Associate Professor Dept. of Computer Science & Engineering, NIT, Hamirpur



Dr. Divakar Yadav, Associate Professor Dept. of Computer Science & Engineering, NIT, Hamirpur



IQAC Pr Badri Narayan Siubudhi Asistani Professor IIT, Jammu

JUIT/WKNG/REGR/2017-18/

Date: 28th August, 2019

#### TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Fire Mock Drill, earthquakes and Disaster management drill will be held on 30th August, 2019 at 1430hrs in **Mugal Garden** (Orange Shed) for Fire Fighting Team, Isolated Team, Fire Salvage Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Lab staff, LRC, Administrative Staff, Account Section staff, store, Electrical, Laundry, Drivers and Annapurna staff as well as faculty, nonteaching staff and students. All personnel will be present in Mugal Garden (Orange shed) at the time given above.

Don.

Maj Gen. Rakesh Bassi, SM (Retd.) Registrar & Dean of students

#### Copy to:

- > Admin Office
- Maintenance
- > Fire Officer
- Security Incharge
- Housekeeping Incharge
- > Contractor (Sh. Duli Chand)
- Contractor (Sh. Dalip Singh Yadav)
- > Khan Contractor
- Mess Incharge
- > Store
- > Account Section
- > Electrical
- > Laundry
- Dispensary



JUIT/WKNG/REGR/2017-18/

Date: 23rd October, 2019

# TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Fire Mock Drill, Earthquake and Disaster management drill will be held on 29th October, 2019 at 1200hrs in Volleyball Ground for Fire Fighting Team, Isolated Team, Fire Salvage Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Lab staff, LRC, Administrative Staff, Account Section staff, store, Electrical, Laundry, Drivers and Annapurna staff as well as faculty, nonteaching staff and students. All personnel will be present in Volleyball Ground at the time given above.



Maj Gen. Rakesh Bassi, SM (Retd.) Registrar & Dean of students

#### Copy to:

- Admin Office
- Maintenance
- > Fire Officer
- Security Incharge
- Contractor (Sh. Duli Chand)
- Contractor (Sh. Dalip Singh Yadav)
- Khan Contractor
- Laundry



JUIT/WKG/REGR/2018-19

27<sup>th</sup> December 2019

## TRAINING AND MOCK DRILL ON FIRE FIGHTING

A Fire Mock Drill, Earthquake and Disaster management drill will be held on 30<sup>th</sup> December 2019 at 1500hrs near Azad Bhawan, H-14 for Fire Fighting Team, Isolated Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Lab Staff, LRC, Administrative Staff, Account Section staff, Dispensary, Store, Electrical, Laundry, Drivers and Annapurna staff. All personnel will be present near Azad Bhawan, H-14 at the time given above.

Maj Gen Rakesh Bassi, SM (Retd.) Registrar & Dean of Students

#### Copy to:

Admin Office
Maintenance
Fire Officer
Security Incharge (JIMS & SWIFT)
Laundry
Dispensary
Contractor (Sh. Duli Chand)

















JUIT/WKG/REGR/2019-20

17<sup>th</sup> February 2020

#### LECTURE ON FIRE FIGHTING

A Fire Fighting drill will be held on 19<sup>th</sup> February 2020 at 1500hrs at Volleyball Ground for Fire Fighting Team, Isolation Team, Fire Technical Team, Medical Team, all Security, Maintenance, House Keeping, Lab Staff, LRC, Administrative Staff, Account Section staff, Dispensary, Store, Electrical, Laundry, Drivers, Annapurna staff, Teaching, Non Teaching Staff and Students. All personnel will be present in Volleyball Ground at the time given above. Attendance will be taken.

War

Maj Gen Rakesh Bassi, SM (Retd.) Registrar & Dean of Students

#### Copy to:

- > Admin Office
- Maintenance
- Fire Officer
- Security Incharge (JIMS & SWIFT)
- > Laundry
- Dispensary
- Contractor (Sh. Duli Chand)
- Non Teaching Staff
- Annapurna Staff



#### **Continuous Education Program 2020**

An online five day Continuous Education Program on 'Current Aspects and Research Opportunities in Civil Engineering' was organized by the department of Civil Engineering Jaypee University of Information Technology (JUIT), Waknaghat from 20<sup>th</sup> to 24<sup>th</sup> July 2020.

The program was successfully completed under the auspices of

- Prof. Vinod Kumar Vice Chancellor of JUIT Waknaghat and Patron of the organized
   CEP by Civil Engineering Department.
- Prof. SamirDev Gupta Director and Dean of Academics of JUIT Waknaghat
- Major General Rakesh Bassi (Retd.) Registrar and Dean of Students of JUIT
   Waknaghat
- Prof. Ashok Kumar Gupta HOD of Civil Engineering Department of JUIT Waknaghat and Program Chair of the organized CEP by Civil Engineering Department.
- Dr. Rajiv Ganguly Associate Professor of Civil Engineering Department of JUIT Waknaghat and Program Convener of organized CEP by Civil Engineering Department.
- Dr. Aakash Gupta Assistant Professor of Civil Engineering Department of JUIT
   Waknaghat and Program Convener of organized CEP by Civil Engineering Department
- Mr. Anirban Dhulia Assistant Professor of Civil Engineering Department of JUIT
   Waknaghat and Program Convener of organized CEP by Civil Engineering Department

The Continuous Education Program on 'Current Aspects and Research Opportunities in Civil Engineering comprised mainly of invited and guest lecturers from eminent speakers of renowned institutes covering multifaceted aspects on progress, developments and forthcoming research opportunities in Civil Engineering. Table 1 highlights the program schedule of the conducted CEP program including the names and organizations of the speakers along with the title of lectures (talks) delivered by them.



Table 1: Schedule and Details of Lecture presented by different speakers in the CEP program 2020

Date	Time	Name of Resource Person	Title of Presentation
20/07/2020	10.00 -11.30	Prof. Praveen Agarwal	Updated Flexible Pavement Design as per IRC.
	AM	(NIT Kurukshetra)	
	11.30 AM –	Dr. Surender Singh	Assessment of the Recycled Aggregates for
	01:00 PM	(IIT Madras)	Concrete Pavements.
21/07/2020	10.00 -11.30	Dr. K. Sitaramanjaneyulu	Construction and Quality Control of Flexible
	AM	(CSIR-CRRI)	Pavements.
	11.30 AM –	Dr. Pradeep Kumar	Modern Pavement Evaluation Techniques.
	01:00 PM	(CSIR-CRRI)	
	01.00 PM -	Dr. Pankaj Munjal	Engineered Cementitious Composites (ECC) and
	02.00 PM	(National University of	its applications for strengthening of Masonry
		Singapore)	Structures.
22/07/2020	10.00 AM-	Prof. M. Chandrasekhar	Research in Environmental Engineering and
	11.30 AM	(NIT Warangal)	Recent Trends.
	11.30 AM -	Mr. Krishanu Saha	Application of Data Analytics in Civil
	01.00 PM	(Boston Consulting Group,	Engineering.
		USA)	
23/07/2020	10.00 AM-	Mr. Anil Kumar	Blast Loading on Structures: Fragility Analysis
	11.30 AM	(CCET, Chandigarh)	and their Mitigation.
	11.30 AM -	Dr. Rajesh Kumar	Self Compacting Concrete and Factors Affecting
	01.00 PM	(CCET, Chandigarh)	its Behaviour.
24/07/2020	10.00 AM-	Dr. Indrajit Ghosh	Surrogate safety measures for traffic safety
21/07/2020	11.30 AM	(IIT Roorkee)	assessment under heterogeneous traffic conditions
	4	(	and the second s
	11.30 AM -	Dr. Arpit Goyal (Coventry	Corrosion of Steel in Reinforced Concrete
	01.00 PM	University, UK)	Structures Structures

The CEP was conducted mainly to gain knowledge on the current opportunities in civil engineering and to know about the developing research areas so as to improve the performance of the Civil Engineering faculty members and the participants in different specializations. It was conducted so that the faculty members and the different participants could get more acquainted with recent developments and prevailing opportunities for research in Civil Engineering which if required could be incorporated in up gradation of existing courses or development of new courses to make the students more aware. The program started at 10 AM in the morning and continued till 2.00 PM in the afternoon with minimum of two lectures per day followed by question-answer sessions presented by different eminent speakers of reputed institutes covering a variety of subjects. A detail summary of the topic discussed during the entire CEP program is summarized in Table 1.

The participation in the CEP was overwhelming with a large number of participants from outstation locations with some participants joining from Karnataka, Gujarat, Chhattisgarh and other such states. The overall summary of the participants present in the CEP program is summarized in Table 2.

**Table 2**: Summary of participation Details in the CEP program 2020

Total Number of Registered participants	108
Total Number of external participants	65

Session wise summary of participants is presented in Table 3 below

**Table 3**: Session wise summary of participation Details in the CEP program 2020

Date	Time	Name of Resource Person	Title of Presentation	Maximum number of participants	Minimum number of participants	Percenta ge of external participa nts	Percenta ge of internal participa nts
20/07/2020	10.00 -	Prof. Praveen	Updated	80+	50+	50%	50%
	11.30 AM	Agarwal	Flexible				
		(NIT	Pavement				
		Kurukshetra)	Design as per		(A)	FINFORMA	
			IRC.		THE THINKS	QAC OF	

	11.30 AM	Dr. Surender	Assessment of	80+	50+	50%	50%
	-01:00	Singh	the Recycled				
	PM	(IIT Madras)	Aggregates for				
			Concrete				
			Pavements.				
21/07/2020	10.00 -	Dr. K.	Construction	75+	50+	50%	50%
	11.30 AM	Sitaramanjan	and Quality				
		eyulu	Control of				
		(CSIR-CRRI)	Flexible				
			Pavements.				
	11.30 AM	Dr. Pradeep	Modern	75+	50+	50%	50%
	-01:00	Kumar	Pavement				
	PM	(CSIR-CRRI)	Evaluation				
			Techniques.				
	01.00 PM	Dr. Pankaj	Engineered	75+	50+	50%	50%
	- 02.00	Munjal	Cementitious				
	PM	(National	Composites				
		University of	(ECC) and its				
		Singapore	applications				
			for				
			strengthening				
			of Masonry				
			Structures.				
22/07/2020	10.00	Prof. M.	Research in	75+	50+	50%	50%
	AM-	Chandrasekh	Environmental				
	11.30 AM	ar	Engineering				
		(NIT	and Recent				
		Warangal)	Trends.				
	11.30 AM	Mr. Krishanu	Application of	75+	50+	50%	50%
	-01.00	Saha	Data Analytics				
	PM	(Boston	in Civil				
		Consulting	Engineering.		Self/	OF INFORMATION	
		Consulting	Engineering.		A SANGE UNION	IQAC AKNAGHK**	RCHNO

		Group)					
23/07/2020	10.00	Mr. Anil	Blast Loading	75+	50+	50%	50%
	AM-	Kumar	on Structures:				
	11.30 AM	(CCET,	Fragility				
		Chandigarh	Analysis and				
			their				
			Mitigation.				
	11.30 AM	Dr. Rajesh	Self	75+	50+	50%	50%
	-01.00	Kumar	Compacting				
	PM	(CCET,	Concrete and				
		Chandigarh)	Factors				
			Affecting its				
			Behaviour.				
24/07/2020	10.00	Dr. Indrajit	Surrogate	70+	50+	50%	50%
	AM-	Ghosh	safety				
	11.30 AM	(IIT Roorkee)	measures for				
			traffic safety				
			assessment				
			under				
			heterogeneous				
			traffic				
			conditions				
	11.30 AM	Dr. Arpit	Corrosion of	70+	50+	50%	50%
	-01.00	Goyal	Steel in				
	PM	(Coventry	Reinforced				
		University)	Concrete				
			Structures				



#### **Other Salient Features**

- Video Recording of all lectures by the speakers for the CEP available with the organizing committee.
- Presentation slides of all lectures by the speakers for the CEP available with the organizing committee and has been distributed to participants
- Certificates of participation issued to all registered participants.
- Certificates of resource persons issued to all the listed speakers
- Feedback collected from participants for further improvement in conducting such future online CEP programs
- Feedback collected from speakers for their inputs in conducting such future online CEP programs

Summary Statistics of Feedback received from Participants and Speakers are summarized below in Tables 4 and 5 respectively.

Table 4: Participant feedback details of the CEP program 2020

Total number of participants feedback	86
	Excellent (70%);
	Very Good (27%);
Overall average feedback score	Good (3%)
	Based on a 5 point scale rating system
	(1-5; [poor to excellent])

**Table 5**: Speaker feedback details of the CEP program 2020

Total number of Speaker feedback	9
	Excellent (67%);
	Very Good (33%);
Overall average feedback score	Based on a 5 point scale rating system
	(1-5; [poor to excellent])
	OF WEOR.

#### WHO CAN REGISTER?

- > Faculty members from Universities and Engineering Colleges.
- > Industry Professionals from IT Industries.
- > Students with Engineering background, Researchers and Programmers.

#### **REGISTRATION FEE**

A nominal fee of Rs. 300/- should be paid towards registration fees by participants. One can register himself/herself through payment *via* Online Transfer/ Google Pay/ Paytm.

Beneficiary Name	Punjab National Bank
Branch Name	Shimla
Complete Address	THE MALL, SHIMLA, H.P., INDIA
N CD C	Jaypee University of Information
Name of Beneficiary	Technology, Waknaghat
Account No.	0427002100682105
NEFT Code/ IFSC Code	PUNB0042700
MICR Code	171024002

#### **IMPORTANT NOTES**

# Last Datefor Registration: 26th July, 2020

Registration includes:

- 1. To attend Expert Lectures
- 2. To attend Hands-on
- 3. E-Certificate (After submitting the assignment and feedback)

#### RESOURCE PERSONS

Experts from reputed research &, academic institutions, and Industries such as NIT, TIET, Amity, CMREC, NVEST, ICFAI, IKGU will deliver the sessions and hands-on. Two weeks sessions are planned for the systematic conduction of the programme to help participants in implementing best practices to meet the current industry demand in the field of Cloud Computing, Deep Learning, Network Security, Distributed Computing, etc.

#### **CHIEF PATRONS**

Prof. (Dr.) Vinod Kumar, Vice Chancellor, JUIT, Waknaghat

Prof. (Dr.) Samir Dev Gupta, Dean of Academics & HoD, CSE&IT, JUIT, Waknaghat

Maj. Gen Rakesh Bassi (Retd.), Registrar and Dean of Students, JUIT, Waknaghat

#### ORGANIZING COMMITTEE

Dr. Hemraj Saini, JUIT, Waknaghat

Dr. Himanshu Jindal, JUIT, Waknaghat

 $Dr.\ Monika\ Bharti,\ JUIT,\ Waknaghat$ 

Dr. Aman Sharma, JUIT, Waknaghat

Dr. Geetanjali, JUIT, Waknaghat

#### ADDRESS FOR COMMUNICATION

Dr. Hemraj Saini

JUIT, Waknaghat, Solan (H.P.)-173234

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e-mail: hemraj1977@yahoo.co.in

Dr. Himanshu Jindal,

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Mob: 8054689490

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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Waknaghat-173234

# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Waknaghat-173234

(Established under H.P. Legislative Assembly Act No. 14 of 2002 and Approved by UGC under section 2(f))

# National Level Two Weeks Faculty Development Programme

01

"Ambient Technologies: State-of-Art, Challenges, and Future Directions"





27<sup>th</sup> July, 2020 – 8<sup>th</sup> August, 2020



••••

# Eminent Expertise



## Dr. Dinesh Kumar Saini

Sohar University, Oman **Topic: Security is Moving Target** 



# Dr. Sushma Jain

Thapar Institute of Engg. & Technology, Patiala, India
Topic: Deep Architecture, Learning Algorithms & CNN



# Dr. Sandeep Kumar Panda

ICFAI University Hyderabad, India

Topic: Blockchain Technology and Applications using Ethereum, Solidity



# Dr. Rakesh Goyal

IK Gujral Punjab Technical University, Kapurthala, India **Topic: Blended Learning with Open Broadcaster Software** 



#### Dr. Mohit Saini

National Institute of Technology, Jalandhar, India **Topic: Cloud Computing and its Applications** 



# **Dr. Amritpal Singh**

National Institute of Technology, Jalandhar, India
Topic: Probabilistic Data Structures



## Dr. Vandana Bhatia.

Amity University, Noida, India **Topic: Big Data Analytics** 



National Institute of Technology, Jalandhar, India **Topic: Cloud Computing and Virtualisation** 



#### Dr. Prashant Kumai

National Institute of Technology, Jalandhar, India

Topic: Opportunistic Networking and Device to Device

Communication



# Dr. Ashima Singh

Thapar Institute of Engineering & Technology, Patiala, India

Topic: Distributed Architecture, Cloud Computing Architectures,

Hadoop Architecture, and Map Reduce



#### Mr. Tushar Sharma

NVEST Bangalore, India

Topic: Blockchain Technology and Applications using Ethereum,



#### Dr. Gautam Kumar

CMR Engineering College, Hyderabad, India

Topic: ECC and Non-Commutative Cryptography with Formal Verifications



# Dr. Bhan

Department of Higher Homeation, Haryan India

Topic: Sensor Data Analytics

Saracca



	Inauguration Ceremony						
10:30 AM	Online Joining to FDP Link						
11:00 AM	Speech by <b>Prof.</b> ( <b>Dr.</b> ) <b>Vinod Kumar Vice Chancellor</b> , Jaypee University of Information Technology, Waknaghat, India						
11:30 AM	Speech by <b>Prof.</b> ( <b>Dr.</b> ) <b>Samir Dev Gupta, Dean of Academics</b> , Jaypee University of Information Technology, Waknaghat, India						
12:00 PM	Summary and Thanks						
12:15 PM	FDP Open for participants						



Date	Timing	Speaker	Title
27 <sup>th</sup> July, 2020	12:15AM - 01:45PM	Dr. Dinesh Kumar Saini, <i>Sohar</i>	Security is Moving Target
27 July, 2020	03:30PM- 04:30PM	University, Oman	Discussion of Tools used
	10:30AM - 12:00PM		Deep architecture, learning algorithms & CNN
28 <sup>th</sup> July, 2020	02:00PM - 03:30PM		Hands-On
	03:45PM- 04:45PM	Technology, Patiala, India	Self-Practice Session
	10:30AM - 12:00PM		Probabilistic data structures
29 <sup>th</sup> July, 2020	02:00PM - 03:30PM	This title of Teeline 1859,	Hands-On
	03:45PM- 04:45PM	Jalandhar, India	Self-Practice Session
	10:30AM - 12:00PM	Dr. Mohit Saini, National Institute of Technology,	Cloud Computing and its Applications
30 <sup>th</sup> July, 2020	02:00PM - 03:30PM	Jalandhar, India &	Cloud Computing and Virtualisation
	03:45PM- 04:45PM	Dr. Nisha Chaurasiya, <i>National</i> Institute of Technology, Jalandhar, India	Self-Practice Session
31 <sup>st</sup> July, 2020	10:30AM - 12:00PM		Blended learning with Open Broadcaster Software
	02:00PM - 03:30PM	Dr. Rakesh Goyal, IK Gujral Punjab Technical University, Kapurthala, India	Hands-On
	03:45PM- 04:45PM	<b>T</b> , =	Self-Practice Session
			Page 2 of 3

Date	Timing	Speaker	Title
	10:30AM - 12:00PM	Dr. Bharti Saneja, <i>Project Officer</i> ,	Sensor Data Analytics
1 <sup>st</sup> August, 2020	02:00PM - 03:30PM	Department of Higher Education,	Hands-On
	03:45PM- 04:45PM	Haryana, India	Self-Practice Session
	10:30AM - 12:00PM		Big Data Analytics
3 <sup>rd</sup> August, 2020	02:00PM - 03:30PM	Dr. Vandana Bhatia, <i>Amity</i> <i>University, Noida, India</i>	Hands-On
	03:45PM- 04:45PM		Self-Practice Session
	10:30AM - 12:00PM	Dr. Sandeep Kumar Panda, ICFAI	Blockchain Technology and Applications using Ethereum, Solidity
4 <sup>th</sup> – 5 <sup>th</sup> August, 2020	02:00PM - 03:30PM	S	Blockchain Technology and Applications using Ethereum, Solidity
	03:45PM- 04:45PM	Mr. Tusar Sarma, <i>NVEST Bangalore, India</i>	Self-Practice Session
	10:30AM - 12:00PM	De Carrier Variant CMD	ECC and Non-Commutative Cryptography with Formal Verifications
6 <sup>th</sup> August, 2020	02:00PM - 03:30PM	Dr. Gautam Kumar, CMR Engineering College, Hyderabad,	Hands-On
	03:45PM- 04:45PM	India	Self-Practice Session
	10:30AM - 12:00PM	Dr. Ashima Singh, Thapar Institute	Distributed Architecture, Cloud Computing Architectures, Hadoop Architecture and Map Reduce
7 <sup>th</sup> August, 2020	02:00PM - 03:30PM	of Engineering & Technology, Patiala, India	Hands-On
	03:45PM- 04:45PM	T unuu, muu	Self-Practice Session
8 <sup>th</sup> August, 2020	10:30AM - 12:00PM	Dr. Prashant Kumar, National Institute of Technology, Jalandhar, India	Opportunistic Networking and Device to Device  Communication
	02:00PM - 03:30PM	Valedictory Session	NA *MAKNAGHAN * 100
		,	Page 3 of 3

# Recent Advances in Computational Intelligence for Signal Processing (RACISP-2020)

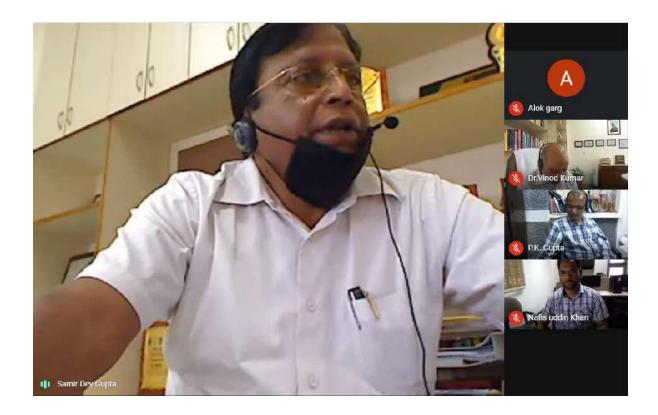
#### **REPORT**

Department of Electronics and Communication Engineering organized one week online short term course on "Recent Advances in Computational Intelligence for Signal Processing (RACISP-2020)". The program was scheduled from 10<sup>th</sup> -15<sup>th</sup> August, 2020. This short term course was coordinated by Dr. Sunil Datt Sharma and Dr. Vikas Baghel. Dr. Nafis Uddin Khan was the convener of the course.

The program was inaugurated by honourable Vice –chancellor (**Prof. Vinod Kumar**) and Dean Research (**Prof. Samir Dev Gupta**). They highlighted the importance of computational techniques in signal processing and motivated the participants. More than 110 faculty members, research scholars from various universities/institutes and industry professionals from different organizations participated in this course.

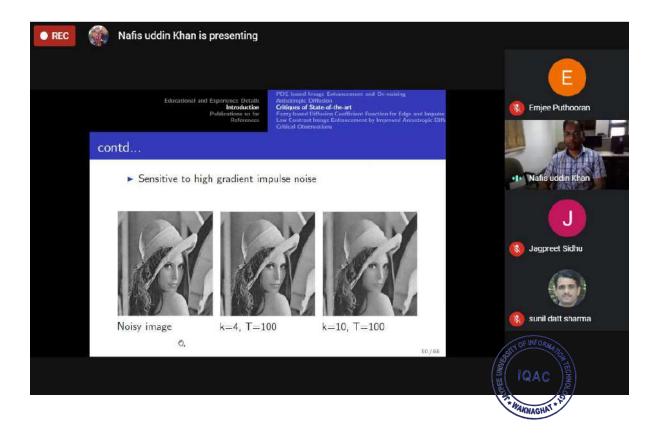




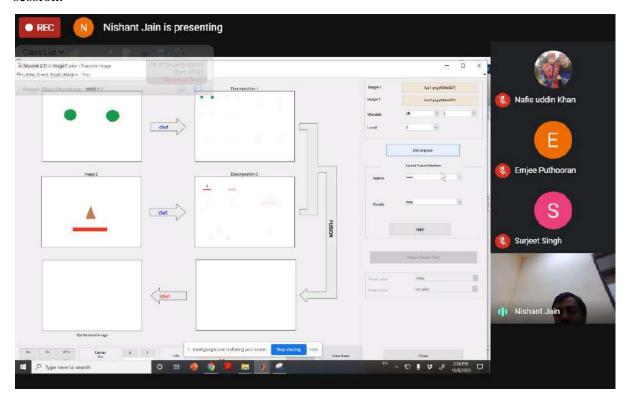


# **Expert Sessions:**

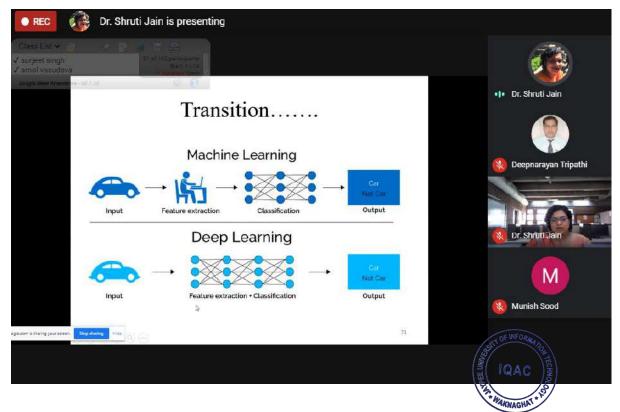
First session was taken by **Dr. Nafis Uddin Khan** and he focussed on Fuzzy inference based edge detection in digital image processing and also highlighted on the open research problems in this area.



**Dr. Nishant Jain** discussed about the fusion of biomedical imaging modalities in the second session.



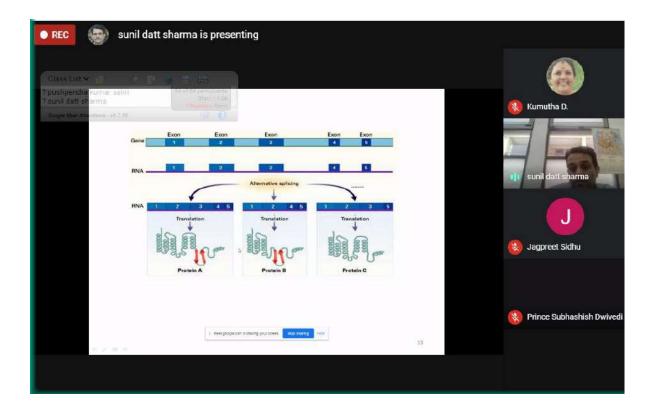
Third Session was conducted by **Dr. Shruti Jain, Associate Professor,** and she highlighted the area of biomedical engineering, time and frequency characterisation of bio signals and bio signal processing. She also motivated the participants to do the research in this area.



**Dr. Harsh Sohal** discussed the FPGA based digital signal processing and their implementation in fourth session.

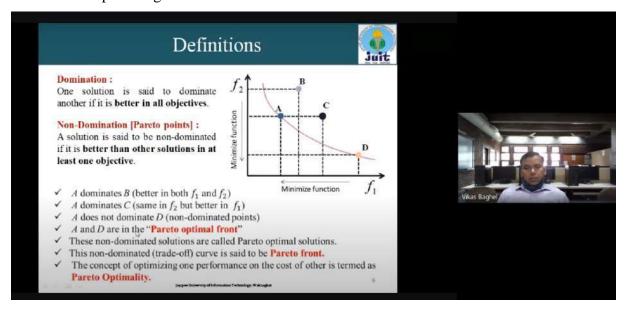


Fifth session & Sixth session were taken by **Dr. Sunil Datt Sharma** with **Mr. Pardeep Garg** and they discussed about the importance genomics signal processing in coming era and also discussed the open research research directions in this area.

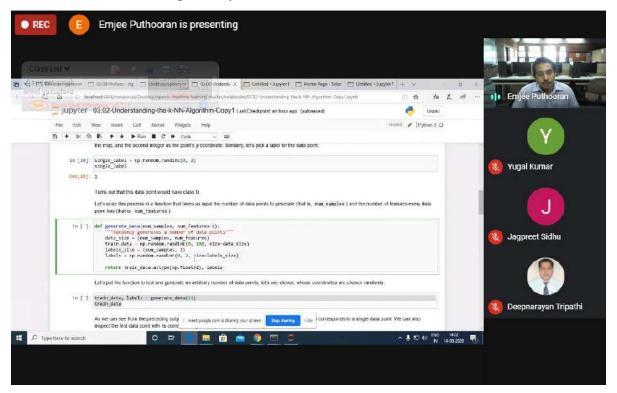




Session seven was taken by **Dr. Vikas Baghel** and he discussed the fundamentals and evolutionary methods for multi-objective optimization. He also conducted hand-on-session on the same topic in eighth session.

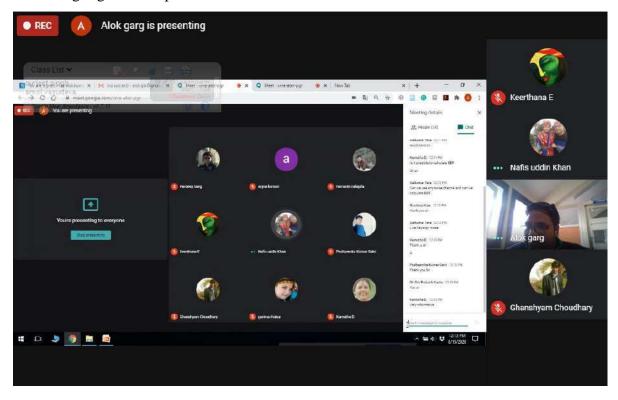


**Dr. Emjee Puthooran** conducted talk and hands on session machine learning using python in ninth and tenth session respectively.





Eleventh session was taken by **Dr. Alok Kumar** on role of threshold in spectrum sensing and he also highlighted on open research directions in this area.



In the last session of the course, queries of the participants were answered by all speakers and suggestions from the participants were taken.

The short term course was concluded with valedictory function. The highlights of the course were given by **Dr. Vikas Baghel**. The valedictory speech was given by **Dr. Nafis U. Khan**. The vote of thanks was given by **Dr. Sunil Datt Sharma**. He highlighted the immense contribution of the Organizing Committee members and experts. He presented a special thanks to **Prof. Vinod Kumar**, Vice—chancellor, **Prof. Samir Dev Gupta**, Dean Research and **Dr. Rajiv Kumar**, Program chair & HoD ECE. He also showed his gratitude towards all speakers for their wonderful talks. He also thanked all the participants who made this event a grand success by participating wholeheartedly.

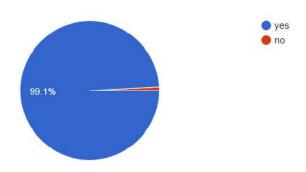
## **Feedback by Participants:**

Most participants felt that the correct direction and knowledge for conducting scientific research was obtained in the short term course.

# What is your rating of the following aspects of STC? 100 Very Good Good Fair Poor Very Poor 75 Selection of Topics Presentations Questions and discussions Overall Organization

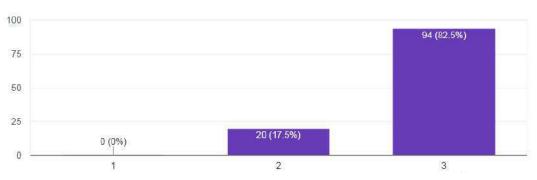
#### Did the STC meet your learning and research objectives?

#### 114 responses



#### What is your overall evaluation of the short term course?

#### 114 responses





# Workshop on Waste Management – Issues and Concerns 2020

An online two day Workshop on 'Waste Management – Issues and Concerns' was organized by the department of Civil Engineering Jaypee University of Information Technology (JUIT), Waknaghat from 20<sup>th</sup> to 21<sup>st</sup> August 2020.

The program was successfully completed under the auspices of

- Prof. Vinod Kumar Vice Chancellor of JUIT Waknaghat and Patron of the organized Workshop by Civil Engineering Department.
- Prof. SamirDev Gupta Director and Dean of Academics of JUIT Waknaghat
- Major General Rakesh Bassi (Retd.) Registrar and Dean of Students of JUIT
   Waknaghat
- Prof. Ashok Kumar Gupta HOD of Civil Engineering Department of JUIT Waknaghat and Program Chair of the organized Workshop by Civil Engineering Department.
- Dr. Rajiv Ganguly Associate Professor of Civil Engineering Department of JUIT Waknaghat and Program Convener of organized Workshop by Civil Engineering Department.
- Dr. Rishi Rana Assistant Professor of Civil Engineering Department of JUIT Waknaghat and Program Convener of organized Workshop by Civil Engineering Department
- Mr. Kaushal Kumar Assistant Professor of Civil Engineering Department of JUIT Waknaghat and Program Coordinator of organized Workshop by Civil Engineering Department

The Workshop on 'Waste Management – Issues and Concerns comprised mainly of invited and guest lecturers from eminent speakers of renowned institutes covering multifaceted aspects on progress, developments, legislations and existing drawbacks in Waste Management. Table 1 highlights the program schedule of the conducted Workshop including the names and organizations of the speakers along with the title of lectures (talks) delivered by them.



Table 1: Schedule and Details of Lecture presented by different speakers in the Workshop 2020

Date	Time	Name of Resource Person	Title of Presentation
	10.30 -11.00	Inaugural Session	Inaugural Lecture
	AM		
	11.00 AM –	Prof. Babu Alappat	Rapid Characterization Of MSW For Integrated
	12:00 AM	(IIT Delhi)	Waste Processing Systems.
	12.30 -01.30	Dr. Anoop Verma	Application of waste material towards
21/08/2020	PM	(Thapar University)	environmental remediation; Value addition to the
21/06/2020			waste.
	01.30 -02.30	Prof. M. Chandrasekhar	Estimation of Indices for Assessment of Quality
	PM	(NIT Warangal)	of Compost Derived from Municipal Solid Waste.
	02.30 -03.30	Ms. Nidhi Sharma/Etosha	Waste management in Sensitive Ecosystems –
	PM	Chatterjee (Waste Warriors,	Success and Challenges.
		Dharamshala)	
	10.00 -11.00	Sh. S.K Shandil	Waste Management: Rules and regulations
	AM	(Environmental Engineer,	
		Himachal Pradesh Pollution	
		Control Board, Shimla)	
		Dr. Shakti Arora	Solid Waste Management
22/08/2020		(PEC Chandigarh)	
	12.00 - 01.00	Sh. Pradeep Sangwan	Waste Management Issues in Himachal Pradesh
	PM	(National University of	
		Singapore)	
	01:00 -	Prof. Ashok Kumar Gupta	Valedictory Session and Closure
	01:30 PM	(HOD CE – JUIT)	

The workshop was conducted mainly to gain knowledge on the current practices of waste management and to provide a platform for interaction between academicians, senior scientists, research scholars, NGO's and all other personals involved in MSW management at different levels. Further, the workshop was conducted so that the faculty members and the different participants could get more acquainted with recent developments and prevailing opportunities for research in waste management with additional and pertinent information waste management could

be incorporated in up gradation of existing courses or development of new courses to make the students more aware. The program started at 10.30 AM in the morning and continued till 3.30 PM in the afternoon on the first day with minimum of three lectures per day followed by question-answer sessions on the topics presented by different eminent speakers. A detail summary of the topic discussed during the entire Workshop program is summarized in Table 1.

The participation in the Workshop was overwhelming with a large number of participants from outstation locations with some participants joining from Karnataka, Gujarat, Chhattisgarh and other such states. Further, there were more than 15 foreign participants who had joined to attend the program. The overall summary of the participants present in the Workshop program is summarized in Table 2.

**Table 2**: Summary of participation Details in the Workshop 2020

Total Number of Registered participants	246
Total Number of external participants	200

Session wise summary of participants is presented in Table 3 below.

**Table 3**: Session wise summary of participation Details in the Workshop program 2020

Date	Time	Name of Resource Person	Title of Presentation	Maximum number of participants	Minimum number of participants	Percenta ge of external participa nts	Percentage of internal participant s
20/08/2020	10.30 - 11.00 AM	Inaugural Session	Inaugural Lecture	100+	65+	75%	25%
	11.00 AM - 12:00 AM	Prof. Babu Alappat (IIT Delhi)	Rapid Characterization Of MSW For Integrated Waste Processing Systems.	100+	65+	75%	25%
	12.30 - 01.30 PM	Dr. Anoop Verma	Application of waste material	90+	55+	75%	25%

		(Thapar	towards				
		University)	environmental				
			remediation;				
			Value addition to				
			the waste.				
	01.30 -	Prof. M.	Estimation of	90+	55+	75%	25%
	02.30 PM	Chandrasekh	Indices for				
		ar	Assessment of				
		(NIT	Quality of				
		Warangal)	Compost Derived				
			from Municipal				
			Solid Waste.				
	02.30 -	Ms. Nidhi	Waste	90+	55+	75%	25%
	03.30 PM	Sharma/Etos	management in				
		ha Chatterjee	Sensitive				
		(Waste	Ecosystems –				
		Warriors,	Success and				
		Dharamshala	Challenges.				
		)					
21/08/2020	10.00 -	Sh. S.K	Waste	80+	50+	75%	25%
	11.00 AM	Shandil	Management:				
		(Environment	Rules and				
		al Engineer,	regulations				
		Himachal					
		Pradesh					
		Pollution					
		Control					
		Board,					
		Shimla)					
	11.00 AM	Dr. Shakti	Solid Waste	80+	50+	75%	25%
	- 12:00	Arora	Management				
	PM	(PEC			* * * * * * * * * * * * * * * * * * *		
		Chandigarh)			SELT OF INFO	RMATION	
					IQA	C RECHNOO	

12.00 -	Sh. Pradeep	Waste	80+	50+	75%	25%
01.00 PM	Sangwan	Management				
	(National	Issues in				
	University of	Himachal				
	Singapore)	Pradesh				
01:00 -	Prof. Ashok	Valedictory	80+	50+	75%	25%
01:30 PM	Kumar Gupta	Session and				
	(HOD CE –	Closure				
	JUIT)					

#### **Other Salient Features**

- Video Recording of all lectures by the speakers for the Workshop available with the organizing committee.
- Presentation slides of all lectures by the speakers for the Workshop available with the organizing committee and has been distributed to participants
- Certificates of participation issued to all registered participants.
- Certificates of resource persons issued to all the listed speakers
- Feedback collected from participants for further improvement in conducting such future online Workshops
- Feedback collected from speakers for their inputs in conducting such future online Workshops

Summary Statistics of Feedback received from Participants and Speakers are summarized below in Tables 4 and 5 respectively.

**Table 4**: Participant feedback details of the Workshop 2020

Total number of participants feedback	153
	Excellent (71%);
	Very Good (26%);
Overall average feedback score	Good (3%)
	Based on a 5 point scale rating system
	(1-5; [poor to excellent)

 Table 5: Speaker feedback details of the Workshop 2020

Total number of Speaker feedback	7
	Excellent (71%);
	Very Good (29%);
Overall average feedback score	Based on a 5 point scale rating system
	(1-5; [poor to excellent])

Rajiv Ganguly
Associate Professor
Department of Civil Engineering
JUIT Waknaghat



#### WHO CAN REGISTER?

- > Faculty Members
- > Research Scholars

#### REGISTRATION

There is no registration fee for the participants to attend the FDP. E-certificate will be provided to all participants after successful completion of FDP.

You can registered with the following link:

https://forms.gle/peQCiAhQQVVSuMsd9

#### **IMPORTANT DATE**

**Last Date for Registration:** 29<sup>th</sup> August, 2020

#### RESOURCE PERSONS

Dr. Vijay Kumar, NIT Hamirpur, HP

Dr. CS Azad, NIT Jamshedpur Jharkhand

Dr. BK Sarkar, BIT Mesra, Ranchi

Dr. Mukta Muzamdar, University of North Bengal

Dr. Parneeta Sidhu, Manav Rachna University, Faridabad

Dr. Sumit Gupta, Amity University, Noida

Dr. Vijinder Singh, UPES Dehradun

Dr. Meenakshi, NITTTR Chandigarh

Mr. Deepesh Kumar, TCS Kolkata

Dr. Sudeep Kumar, Nirma University Gujarat

Dr. Manoj Diwakar, Graphics Era University Dehradun

\*Other resource persons are from Jaypee University of Information Technology, Waknaghat, Solan (H.P.), India.

#### **CHIEF PATRONS**

Prof. (Dr.) Vinod Kumar, Vice Chancellor, JUIT, Waknaghat

Prof. (Dr.) Samir Dev Gupta, Dean of Academics & HoD, CSE&IT, JUIT, Waknaghat

Maj. Gen Rakesh Bassi (Retd.), Registrar and Dean of Students, JUIT, Waknaghat

#### **CONVENORS**

Dr. Yugal Kumar, JUIT Waknaghat Dr. Pardeep Kumar, JUIT Waknaghat

#### COORDINATORS

Dr. Jagpreet Sidhu, JUIT Waknaghat

Dr. Amit Kumar, JUIT Waknaghat

Dr. Mrityunjay Singh, JUIT Waknaghat

#### ADDRESS FOR COMMUNICATION

Dr. Yugal Kumar,

JUIT, Waknaghat, Solan (H.P.)-173234

Mob: 9897709834

Dr. Mrityunjay Singh,

JUIT, Waknaghat, Solan (H.P.)-173234

Mob: 9045372346

E-mail: citml.juit@gmail.com



JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Waknaghat-173234

# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY Waknaghat-173234

(Established under H.P. Legislative Assembly Act No. 14 of 2002 and Approved by UGC under section 2(f))

# One Week Faculty Development Program

or

"Computational Intelligence Techniques for Machine Learning"



August 31st - 5th September, 2020

•••



S.No.	Date	Time	Topic	Faculty	Venue
1	22-Dec-20	10:30 - 12:30	Introduction to MIT app Inventer	Dr. Vikash Baghel	CL-1
2	22-Dec-20	14:30 - 16:30	Bulding Mobile application	Dr. Vikash Baghel	CL-1
3	23-Dec-20	10:30 - 12:30	Interfacing with Arduino	Dr. Vikash Baghel	CL-1
4	23-Dec-20	14:30 - 16:30	Creation of a new project in MIT app Inventer	Dr. Vikash Baghel	CL-1
5	29-Dec-20	10:30 - 12:30	Tinkercad	Mr.Munish Sood	CL-1
6	30-Dec-20	10:30 - 12:30	Tinkercad	Mr.Munish Sood	CL-1
7	31-Dec-20	9:30 - 12:30	Interaction with the lab staff	Dr.Salman Talluri	ECL-5
8	31-Dec-20	16:00- 16:30	Interaction with the lab staff	Dr.Salman Talluri	ECL-5
9	02-Jan-21	15:00 - 17:00	Lab view for Digital Signal Processing Lab	Dr. Sunil Datt Sharma	CL-1
10	04-Jan-21	15:00 - 17:00	Lab view for Digital Signal Processing Lab	Dr. Sunil Datt Sharma	CL-1
11	05-Jan-21	10:30 - 12:30	Python Programming	Dr. Emjee Puthooran	CL-1
12	03-Jan-21	14:30 - 16:30	r yuloli Flografillillig	Dr. Emjee Futhooran	CL-1
13		09:30 - 12:30	WiCOMM-T SDR kit.	Dr. Shweta Pandit	ECL-8
13	07-Jan-21				
14		15:30 - 16:30	Experiments of Electrical Science Lab	Dr. Shweta Pandit	ECL-1
15	08-Jan-21	10:30 - 12:30	Signals and Communication Systems with	Mr. Pradeep Garg	CL-1
16	00-Jan-21	14:30 - 16:30	MATLAB	Mir. Fraucep Garg	CL-1
17					CL-1
1 /	09-Jan-21		Verilog HDL	Dr. Harsh Sohal	CL-1
		12:00 - 13:30			
18		14:00 - 16:30			CL-1



# Faculty Development Program on 'Waste management for Sustainable Development'

An online one week Faculty Development Program on 'Waste Management for Sustainable Development' was organized by the department of Civil Engineering Jaypee University of Information Technology (JUIT), Waknaghat from 4<sup>th</sup> to 8<sup>th</sup> January 2021.

The program was successfully completed under the auspices of

- Prof. Vinod Kumar Vice Chancellor of JUIT Waknaghat and Patron of the organized
   FDP by Civil Engineering Department.
- Prof. Samir Dev Gupta Dean of Academics of JUIT Waknaghat
- Major General Rakesh Bassi (Retd.) Registrar and Dean of Students of JUIT Waknaghat
- Prof. Ashok Kumar Gupta HOD of Civil Engineering Department of JUIT Waknaghat
   and Program Chair of the organized Workshop by Civil Engineering Department.
- Dr. Rishi Rana Assistant Professor of Civil Engineering Department of JUIT Waknaghat
   and Program Convener of organized Workshop by Civil Engineering Department
- Mr. Kaushal Kumar Assistant Professor of Civil Engineering Department of JUIT
   Waknaghat and Program Convener of organized Workshop by Civil Engineering
   Department

The FDP on 'Waste Management for Sustainable Development' comprised mainly of invited and guest lecturers from eminent speakers of renowned institutes covering multifaceted aspects on progress, developments, legislations and existing drawbacks in Waste Management. Table-1 highlights the program schedule of the conducted FDP including the names and organizations of the speakers along with the title of lectures (talks) delivered by them.



**Table 1**: Schedule and Details of Lecture presented by different speakers in the FDP 2021

Date	Time	Name of Resource Person	Title of Presentation
04/01/2021 (Monday)	10:30AM- 10:45 AM	Inaugural Session	Inaugural Lecture
	10:45AM- 12:00PM	<b>Dr. Bharat Bhushan</b> , IOSH, CWMP, IWM, Consultant, Splash International, Kolkata	Household Hazardous and Sanitary Waste Management
	12:00PM- 01:15PM	<b>Dr. Nitin Goyal</b> , Principal Scientist, CSIR-NEERI, Mumbai Zonal Centre, Mumbai	Air Quality Management to Achieve the Sustainable Development Goals in India
05/01/2021	10:00 AM- 11:15 AM	<b>Prof. N S Maurya</b> , Dept. of Civil Engg., NIT Patna	Human excreta: A key resource for sustainable development
(Tuesday)	11:15 AM- 12:30 PM	Mr. Aloysius CC, Consultant, POLUCHEM Laboratories Pvt. Ltd., Kalamassery, Kerala	Significance of Effluent Treatment Plant in Slaughterhouse and Meat Processing Units
06/01/2021 (Wednesday)	10:00 AM- 11:15 AM	<b>Dr. Nikhil Saboo</b> , Assistant Professor, Dept. of Civil Engg., IIT(BHU) Varanashi	Mix Design of Reclaimed Asphalt Pavement Materials
	11:15 AM- 12:30 PM	Prof. Meena Kumari Sharma, Head Dept. of Civil Engg., Manipal University, Jaipur	Waste Management Techniques in Non-Sewered Areas
07/01/2021	10:00 AM- 11:15 AM	<b>Dr. Amit Kumar</b> , Assistant Professor, Dept. of Civil Engg., NIT Jaipur	Machine Learning in Waste Management
(Thursday)	11:15 AM- 12:30 PM	<b>Dr. Himangana Gupta</b> , Postdoctoral Fellow, United Nations University, Tokyo	National Greenhouse Gas Emissions from the Waste Sector
08/01/2021	10:00AM- 11:15AM	Dr. Kamalpreet Kaur, Environmental and Sustainability Consultant Analyst (R&D), Vinz Inc, Toronto, CANADA	Waste Management for Sustainable Development" with main focus on Plastics/Micro-plastics
(Friday)	11:15AM- 12:30PM	Shalini Goyal Bhalla, M D, International Council for Circular Economy, Delhi	Circular Economy and its competitive advantage
	12:30PM- 01:00PM	<b>Prof. A.K. Gupta</b> , HOD CE, JUIT	Closing Ceremony

The FDP was conducted mainly to gain knowledge on the current practices of waste management and to provide a platform for interaction between academicians, senior scientists, research scholars, NGO's and all other personals involved in waste management and legislations at different levels. Further, the FDP was conducted so that the faculty members and the different participants could get more acquainted with recent developments and prevailing opportunities for research in waste management with additional and pertinent information which if required could be incorporated in up gradation of existing courses or development of new courses to make the students more aware. The program started at 10.30 AM in the morning and continued till 2.30 PM in the afternoon on the first day with minimum of three lectures per day followed by question-answer sessions on the topics presented by different eminent speakers. A detail summary of the topic discussed during the entire FDP program is summarized in Table 1.

The participation in the FDP was overwhelming with a large number of participants from outstation locations with some participants joining from Karnataka, Gujarat, Chhattisgarh and other such states. Further, there were more than 15 foreign participants who had joined to attend the program. The overall summary of the participants present in the Workshop program is summarized in Table 2.

**Table 2**: Summary of participation Details in the FDP 2021

Total Number of Registered participants	108
Total Number of external participants	76

#### **Other Salient Features**

- Video Recording of all lectures by the speakers for the FDP available with the organizing committee.
- Presentation slides of all lectures by the speakers for the FDP available with the organizing committee and has been distributed to participants
- Certificates of participation issued to all registered participants.



- Certificates of resource persons issued to all the listed speakers Feedback collected from participants for further improvement in conducting such future online FDPs
- Feedback collected from speakers for their inputs in conducting such future online FDPs.

Summary Statistics of Feedback received from Participants and Speakers are summarized below in Tables 3 and 4 respectively

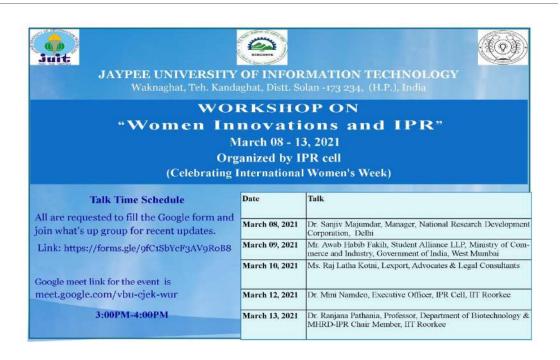
Table 3: Participant feedback details of the FDP 2021

Total number of participants feedback	63		
	Excellent (75%);		
Overall average feedback score	Very Good (22%);		
	Good (3%)		
	Based on a 5 point scale rating system		
	(1-5; [poor to excellent])		

Table 4: Speaker feedback details of the FDP 2021

Total number of Speaker feedback	10
Overall average feedback score	Excellent (71%);  Very Good (29%);  Based on a 5 point scale rating system  (1-5; [poor to excellent])





# Report

#### "Women Innovations and IPR"

IPR Cell JUIT organized a one week workshop on "Women Innovations and IPR" in Jaypee University of Information Technology in collaboration with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE) from March 08 - 13, 2021.





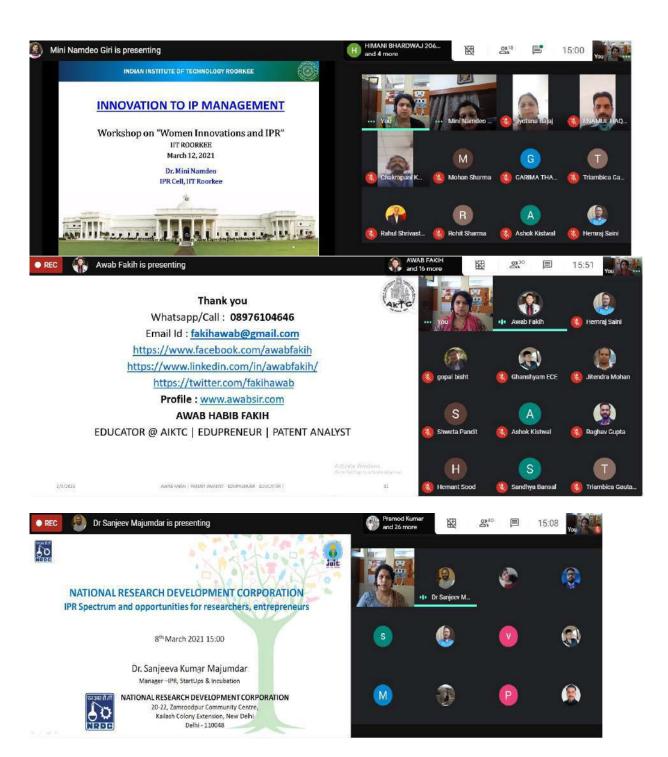


Details of the events of workshop are:

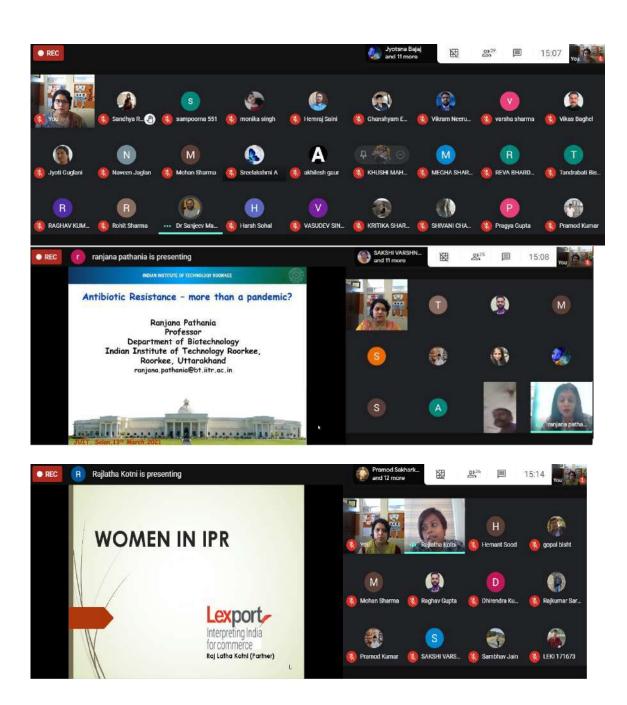
Date	Events	Title
March 08, 2021	Dr. Sanjiv Majumdar, Manager Manager in StartUp Activities & Intellectual Property Division, National Research Development Corporation, Delhi	IPR Spectrum and opportunities for researchers, entrepreneurs
March 09, 2021	Mr. Awab Habib Fakih, Student Alliance LLP, Ministry of Commerce and Industry, Government of India, West Mumbai	Basic of IPR & Indian Patent Filling Procedure
March 10, 2021	Ms. Raj Latha Kotni, Lexport, Advocates & Legal Consultants	Women in IPR
March 12, 2021	Dr. Mini Namdeo, Executive Officer, IPR Cell IIT Roorkee	Innovation to IP Management
March 13, 2021	Dr. Ranjana Pathania, Professor, Department of Biotechnology & MHRD-IPR Chair Member, IIT Roorkee	Antibody Resistance- more than a Pandemic.

We received overwhelming responses not only from Himachal Pradesh but also from the states of Punjab, Tamil Nadu, Orrisa, Gujarat, Maharashtra, Telangana, and Karnataka. The total no. of entries received for the workshop was 40. E-certificates have been given to all active participants.

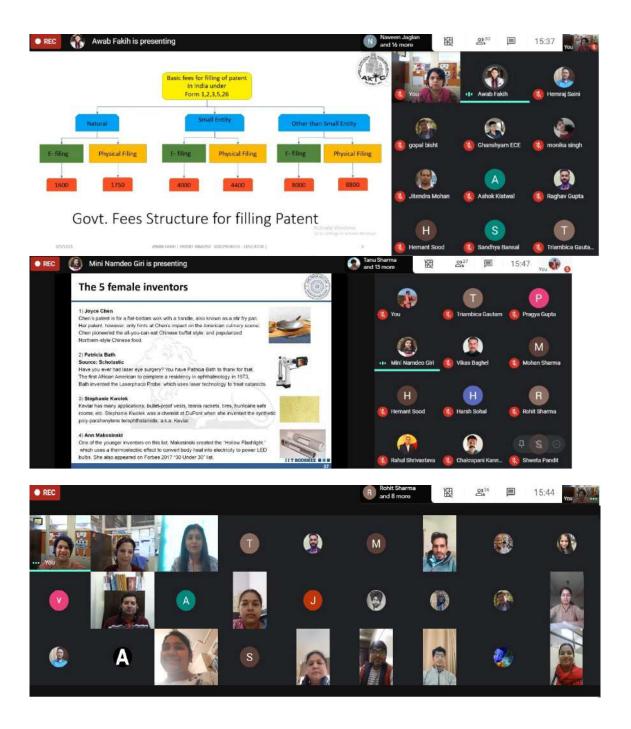












The workshop was ended with the vote of thanks by IPR cell co-coordinator Dr. Shruti Jain.





# Jaypee University of Information Technology, Waknaghat, Solan, H.P.



# RESEARCH AND INNOVATION SHOWCASE (RAISE)

## Organized by

# IPR CELL

Industry and Academia personnel are invited to submit an INNOVATION PROPOSAL Step-1: Abstract submission (300-350 words).

Step-2: Shortlisted participants should submit a Poster and a short video of 5 minutes.

#### Themes of RAISE

- Electronics & Communication Engineering.
- ➤ Computational Biology & Bioinformatics
- ➤ Computer Science Engineering
- Civil Engineering
- ➤ Basic Sciences
- > Other Interdisciplinary Areas

#### Important Dates:

- Abstract submission by March 20, 2021
- Declaration of result of first phase March 22, 2021
- Poster and video submission by March 24, 2021

#### Mechanisms and Benefits of R.A.I.S.E.

- Declaration of final result by March 25, 2021
- > e-Certificates will be given to all the participants.
- > Exciting three Cash Prizes

1st - Rs. 2000/-, 2nd - Rs. 1500/-3rd - Rs. 1000/-

#### E-mail your Entries at-

Dr. Shruti Jain

shruti.jain@juitsolan.in

Dr. Hemraj Saini

hemraj.saini@juitsolan.in

# Report

# "Research and Innovation Showcase (RAISE)"

The IPR Cell, Jaypee University of Information Technology, Solan in collaboration with Himachal Pradesh Council for Science, Technology & Environment (HIMCOSTE) organized **Research and Innovation Showcase (RAISE)** from March 20 - 25, 2021. The aim of this event is to bring together the industry and academia. The themes for R.A.I.S.E. includes:

- i. Electronics & Communication Engineering.
- ii. Computational Biology & Bioinformatics
- iii. Computer Science Engineering
- iv. Civil Engineering
- v. Basic Sciences
- vi. Other Interdisciplinary Areas



We have received in total **23 innovations** from Chennai, Tamil Nadu, West Bengal, and Himachal Pradesh. Details are :

	Research And Innovation Showcase (RAISE)					
S.No	PARTICIPANT NAME	UNIVERSITY/SCH OOL	STATE	Title		
1	Ramneek Khurana	3rd year, Biotechnology and Bioinformatics department, JUIT	Himachal Pradesh	Trouble in the Paradise: Stubble Burning		
2	Irene Michelle	KCG College of Technology	Karapakkam, Chennai, Tamil Nadu	Smart Sentry		
3	Subash.S	SRM Valliammai Engineering College	Kattankulath ur, Tamil Nadu	A multitasking robot based on a combination of IoT, Machine Learning and Embedded Systems for farmers		
4	Amrisha Vivinya P M A. Prasanth	PSNA College of Engineering and Technology,	Tamilnadu	Smart Electric Pole System		
5	Vishnu.R	PSNA College of Engineering and Technology,	Tamilnadu	Smart Irrigation and Water Draining System		
6	Lokesh V	College of Engineering Guindy, Anna University,	Chennai	Prediction And Forecasting Epilepsy Based on Advanced Machine Learning Algorithms With Feature Extraction		
7	Vansheika	M.Tech Construction Management, JUIT	Himachal Pradesh	An Innovative Empirical Model for Assessing the Effects of Future Pandemics On Status Of Female Labors in Construction Industry		
8	Saurabh Tomar	B.Tech Civil Engg, Jaypee University of Information Technology, Waknaghat, Solan(H.P)	Himachal Pradesh	Screw – In Foundation For Street Lights		
9	Ishita Satija	B.Tech Biotechnology Engg, Jaypee University of Information Technology,	Himachal Pradesh	LOSTO IQAC		

		Waknaghat, Solan(H.P)		
10	Anmol Sharma	B.Tech IT Engg, Jaypee University of Information Technology, Waknaghat, Solan(H.P)	Himachal Pradesh	Nomad Maps
11	Nayanika Sharma, Pranjal Bhatia, Rahul Shrivastava Rahul Shrivastava  Deptt of Biotechnology & Bioinformatics, Jaypee University of Information Technology, Waknaghat, Solan(H.P)		Himachal Pradesh	Big Data Analyis of Alzheimer's Disease using Sorting
12	Kirthana.K Mythrayee.G Punithajothi.N	SRM Valliammai Engineering College	Kattankulath ur	Real Time Water Quality Monitoring System using IoT
13	Soma Banerjee	Dept. of Education	Purulia, West Benagl	The Analytic Aspect of Phyto-Chemicals of <i>Aloe</i> vera Medicinal Plant of Khetri Region, Rajasthan
14	Dipak Kr. Mandal,	Dept. of English	Purulia, West Benagl	Antimicrobial Effects of Medicinal Plant Extracts on Human Pathogenic Microorganisms
15	Athilingam R Vivitha E Shenbagadevi M	Deptt of ECE, Nadar Saraswathi College of Engineering and Technology	Theni, Tamil Nadu	Real Time Barcode/QR Code Reader using Python
16	Vaishnavi T.V,	PSNA College of Engineering and Technology	Dindigul, Tamil Nadu- 624 622.	Smart Refrigerator Using AI and IOT
17	Shrivaishnavi V	SRMIST	Ramapuram, Chennai 89	Determining the Proportion of Plastic In Plastic Roads
18	Raga Varshini Sneha K Sowmiya M Karthikeyan K	Bannari Amman Institute of Technology	Tamil Nadu	automated gas stove

19	Sunainy Ajrawat, Chhavi Thakur Dr Hemant Sood	Jaypee University of Information Technology, Waknaghat	Himachal Pradesh	In silico profiling of bioactive compounds of Bauhinia variegata and exploring its pharmacological properties
20	Amanjot Singh Malhotra	Jaypee University of Information Technology, Waknaghat	Himachal Pradesh	Artificial Intelligence: A legitimate enforcement for Health Care System
21	Chhavi Thakur	Jaypee University of Information Technology, Waknaghat	Himachal Pradesh	Application of Artificial Intelligence in Bioinformatics and Drug Discovery
22	Sathya V	V Muthayammal Engineering College, Biomedical Engineering		Basic Sciences
23	Monisha S			A Wireless Sensor Networks based Patient Monitoring System using Integrated ECG module, Pulse Oximeter, Blood Pressure and Temperature Sensor

All the innovations which were received were recommendable. The first round was based on Abstract Submission of app 300-350 words which defines the motivation and outcome of the work. March 20, 2021 was the submission date of the abstracts. The committee member comprises Dr. Shruti Jain, Dr. Hemraj Saini and Dr. Hemant Sood has shortlisted 12 innovations. Declaration of the result of first phase has been done by March 22, 2021. It was difficult to further shortlist the innovations. Round 2 is Poster Submission. IPR members have given a fixed template for designing the poster and it has to be submitted by March 24, 2021. Based on the parameters like innovative idea, poster design and benefit to society committee members came up with final decision. The final result was declared on March 25, 2021 and as follows:

RESULT	PARTICIPANT NAME	Title	Amount
First	Anmol Sharma	Nomad Maps	Rs. 2000
Second	Saurabh Tomar	Screw – In Foundation For Street Lights	Rs. 1500
Second	Ishita Satija	Lenfo	Q&C15

Third	Vaishnavi T.V,	Smart Refrigerator using AI	Rs. 1000
Third	Raga Varshini Sneha K Sowmiya M Karthikeyan K	Automated Gas Stove	Rs. 1000
Consolation	Amrisha Vivinya P M	Smart Electric Pole System	Participation certificate mentioning result
Consolation	Sunainy Ajrawat, Chhavi Thakur Hemant Sood	In Silico Exploration of Medicinal Compounds of Bauhinia Variegata	Participation certificate mentioning result

E-certificates have been given to all active participants.





## Fwd: Tech Interaction with JUIT Solan for G Suite Implementation

3 messages

Raiinder Sandhu <raiinder.sandhu@iuitsolan.in>

6 August 2020 at 17:03

7 August 2020 at 14:56

To: Nishant Jain <nishant.jain@juitsolan.in>, Narendra Kumar <narendra.kumar@juitsolan.in>, Saurabh Srivastava <saurabh.srivastava@juitsolan.in>, Vineet Sharma <vineet.sharma@juitsolan.in>, anupriya.kaur@juit.ac.in, Niraj Singh Parihar <nirajsingh.parihar@juitsolan.in>
Cc: Sunil Kumar Khah <sunil.khah@juitsolan.in>

Please find the Link for tomorrow training

### Tech Interaction with JUIT Solan for G Suite Implementation

When Fri 7 Aug 2020 11:30am – 12:30pm India Standard Time - Kolkata

Joining info Join with Google Meet

meet.google.com/pvc-zhxg-znb

Join by phone

(US) +1 423-781-1274 (PIN: 719892238)

Who • admin@juitsolan.in- organiser

Rajinder Sandhu <rajinder.sandhu@juitsolan.in>

To: admin@juitsolan.in, sachin@marginfotech.com
Cc: gsuite\_core <gsuite\_core@juitsolan.in>, Sunil Kumar Khah <sunil.khah@juitsolan.in>

Dear Sachin

It was a wonderful session and I think the stream option will be beneficial for us a lot. Rest we have covered I think most of the things on our end. Also, thanks for sharing links for resources which we can use. Please share the recording of the session.

The following points need to be addressed:

- 1. To add my name in the CSE faculty group.
- 2. We will try to use Google Attendance with Google Stream also.
- 3. Multi-device login was successful, but we will further try to practice it.
- 4. You need to set settings that students should not be able to start google meetings without the faculty. Also, as you mentioned, faculty will leave last from the meet and make sure everyone logs out of the class.
- 5. You will look for some resources which can be used to teach mathematics.

Everyone, if you have any further questions, please let me know.

#### Regards

## Dr. Rajinder Sandhu

On Thu, 6 Aug 2020 at 17:00, <admin@juitsolan.in> wrote:

Please find the Link for tomorrow

## Tech Interaction with JUIT Solan for G Suite Implementation

[Quoted text hidden]

--Regards Dr. Rajinder Sandhu Assistant Professor CSE/IT

You received this message because you are subscribed to the Google Groups "gsuite\_core" group.

To unsubscribe from this group and stop receiving emails from it, send an email to gsuite\_core+unsubscribe@juitsolan.in.

To view this discussion on the web visit https://groups.google.com/a/juitsolan.in/d/msgid/gsuite\_core/CAN%3DJEv%3DOpLMRhR4\_dCS2oft0qee3SCowrm%2BTMz\_SkKvSHS8uVQ%40mail.gmail.com.

For more options, visit https://groups.google.com/a/juitsolan.in/d/optout.

Saurabh Bansal <saurabh.bansal@juitsolan.in>
To: Nishant Jain <nishant.jain@juitsolan.in>

IQAC PARAMAGHATA

4 June 2023 at 12:35

Faculty In-Charge, JUIT Alumni Cell Member, IQAC, Board of Studies Dept. Biotechnology & Bioinformatics Jaypee University of Information Technology

Waknaghat-173234

Solan, Himachal Pradesh, India

https://www.juit.ac.in/faculty.php?id=264&dep=bio&page=0

91-1792-239222, 9882194150

**ORCID ID:** https://orcid.org/0000-0002-0574-4063

Scopus ID: https://www.scopus.com/authid/detail.uri?authorld=21740782200

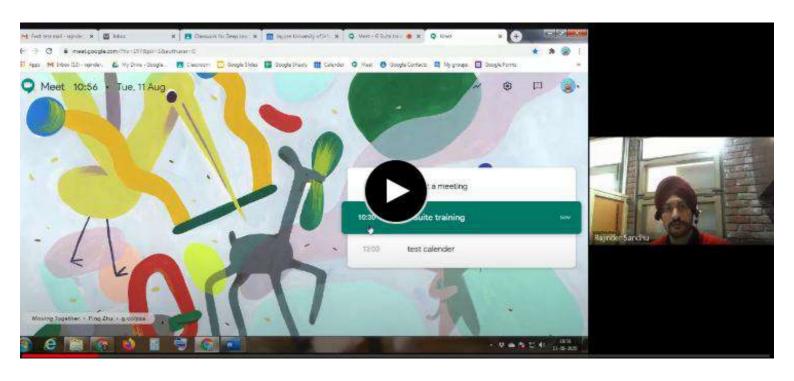
Google Scholar ID: https://scholar.google.co.in/citations?user=u5VNU6sAAAAJ&hl=en&authuser=2

Publon ID: https://publons.com/researcher/2172440/saurabh-bansal/ IRINS ID: JUIT (irins.org)

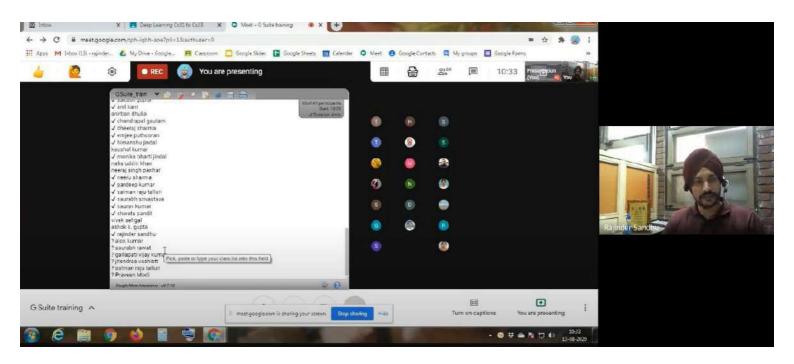
From: Sunil Kumar Khah <sunil.khah@juitsolan.in>
Date: Sat, 3 Jun 2023 at 18:01
Subject: Fwd: Tech Interaction with JUIT Solan for G Suite Implementation
To: Saurabh Bansal <saurabh.bansal@juitsolan.in>

[Quoted text hidden]













## **Intraction with Mercer Mettle**

2 messages

Sunil Kumar Khah <sunil.khah@juitsolan.in>
To: ALLFaculty <allfaculty@juitsolan.in>

18 May 2021 at 12:56

Cc: Samirdev Gupta <samirdev.gupta@juit.ac.in>, vinod.kumar@juit.ac.in

Dear ALL

Mercer Mettle will have an intraction with all faculty members regarding paper setting on Mettle platform tomorrow at 3.00 pm. (19-05-2021) The link will be shared by today with you.

Before the training please go through this link https://support.mettl.com/portal/en/kb/induslynk-training-services-p-ltd/client1/examine

Sunil

Sunil Kumar Khah <sunil.khah@juitsolan.in>

18 May 2021 at 20:18

To: ALLFaculty <allfaculty@juitsolan.in>
Cc: Samirdev Gupta <samirdev.gupta@juit.ac.in>, vinod.kumar@juit.ac.in

Dear ALL

The intraction is shifted to 20-05-2021. The time will be same.

Regards

[Quoted text hidden]



## Exit Report of

## Workshop on Industrial Revolution 4.0 3rd July 2021 to 4th Sep 2021

The Department of Electronics and Communication Engineering, JUIT has organized a Workshop on Industrial Revolution 4.0 with one session organized every Saturday from 3rd July 2021 to 4th Sep 2021.

Industrial Revolution 4.0 comes with the concept of making industries smart and includes technologies like artificial intelligence (AI), robotics, the Internet of Things (IoT), cyber-physical systems, 3D printing, genetic engineering, quantum computing, and many others. Due to the very wide scope of applications, it attracts students, researchers, educators and industrialists from different backgrounds. This workshop will help the participants working or aspiring to work in the field of IoT, Robotics, Smart Home, Cloud Computing, remote sensing, Biomedical, etc. It will help the participants to explore new dimensions for their academic and research activities. Topics to be covered in the workshop are the following: Industry 4.0 technology, Internet of Thing (IoT), Design of Smart Sensors, Cyber Physical Systems, Advanced Robotics, Quantum Cryptography for Internet of Things Security, Wireless Communication for IoT, Industry practices in Artificial Intelligence, and Introduction to Cloud Computing.

Schedule of the workshop was as follows:

Session	Date	Time	Session Title	Speaker
1	3rd July	11:00 -13:00	Introduction to Industry 4.0 technology	Prof. Ghanshyam Singh, Professor, University of Johannesburg
2	10th July	11:00 -13:00	Introduction to IoT: Research Issues & Challenges	Dr. Vijay Chaurasiya, Associate Professor, IIIT Allahabad
3	17th July	11:00 -13:00	Design of Smart Sensors	Dr. Sandeep Hanwate, Assistant Professor, College of Engineering Pune
4	24th July	11:00 -13:00	Development of IoT applications	Mr. Harmesh per Purector, Embsoft Products Research and Development IQAC

5	31st July	11:00 -13:00	Cyber Physical Systems – An insight	Dr. Sahaj Saxena, Assistant Professor, Thapar Institute of Engg & Technology
6	7th Aug	11:00 -13:00	Advanced Robotics and Automation	Mr. Utkarsh Srivastava, Acalvio Technologies, Bengaluru
7	14th Aug	11:00 -13:00	Quantum Key Distribution	Mr. Vivek Kumar, Senior Research Engineer, Centre for Development of Telematics (C-DOT)
8	21st Aug	11:00 -13:00	Data Protocols in IoT Networks	Dr. Pyari Mohan Pradhan, Associate Professor, IIT Roorkee
9	28th Aug	11:00 -13:00	Recent Trends in Data Clustering Algorithms And Their Applications in IoT	Dr. Satyasai Jagannath Nanda, Assistant Professor, MNIT Jaipur
10	4th Sep	11:00 -13:00	Cloud computing Overview – Key to the success of Industry 4.0	Mr. Sanjay Singh, Project Manager, Infosys Ltd.

Following students and Faculty were the part Organizing Team :

S.No.	Email ID	Name	Responsibility	Faculty Coordinator
1	191034@juits olan.in	Falguni Bharadwaj	Certificate and End Video designing	Dr. Nishant
2	191040@juits olan.in	Sanskriti	Reporting of sessions 1,& 2 for website and social media coverage	Dr. Vikas & Dr. Shweta
3	191043@juits olan.in	SRI naga sai kartik vinnakota	Video editing of Session 1 & 2 for Youtube	Dr. Nishant
4	191002@juits olan.in	Sagrika Gargya	Hosting all 10 Sessions with Shweta Maam and Pragya Maam	Dr. Shweta and Lt. Pragya Gupta
5	191038@juits olan.in	Devansh Gupta	Feedback form collection and maintaining attendance sheet	Dr. Vikas
6	191004@juits olan.in	Pragya Tiwari	Hosting all 10 Sessions with Shweta Maam and Pragya Maam	Dr. Shweta and Lt. Pragya Gupta
7	191028@juits olan.in	Ritika tiwari	Reporting of sessions 3 & 4 for website and social	Dr. Vites & Dr. Shwella IQAC

			media coverage	
8	191048@juits olan.in	Prajjwal Shukla	Video editing of Session 3 & 4 for Youtube	Dr. Nishant
9	191012@juits olan.in	Shikhar Trivedi	Reporting of sessions 5 & 6 for website and social media coverage	Dr. Vikas & Lt Pragya
10	191039@juits olan.in	Ambar tiwari	Video editing of Session 5 & 6 for Youtube	Dr. Nishant
11	191021@juits olan.in	Shubham jha	Reporting of sessions 7 & 8 for website and social media coverage	Dr. Vikas & Lt Pragya
12	191045@juits olan.in	Anjali rana	Video editing of Session 7 & 8 for Youtube	Dr. Nishant
13	191018@juits olan.in	Pratham bhardwaj	Reporting of sessions 9 & 10 for website and social media coverage	Dr. Vikas & Lt Pragya
14	191046@juits olan.in	Stuti Roy	Video editing of Session 9 & 10 for Youtube	Dr. Nishant

Total of 240 Registrations were received from across the globe.

Category	No. of Participants
Female	60
Participants from JUIT	50
Participants from outside	144
Participants from abroad	9
Employee in Industry	15
Entrepreneurs	2
Faculty	87
Research Scholar	25
Student (UG)	58
Technical staff	5

All the sessions were conducted through Google Meet. Feedback was collected from the participants after every session of the workshop. At the end of the workshop 74 participants with more than 80% attendance were given the e-Certificates. e-Certificate were also given to our keynote speakers as a token of appreciation.

Dr. Nishant Jain, Dr. Shweta Pandit, Dr. Vikas Baghel, and Lt. Pragya Gupta, Assistant Professors in ECE, JUIT were the coordinators for this workshop.



## **Exit Report**

of

## Workshop on Image Processing with Deep Learning (22nd - 26th March 2022)

The Department of Electronics and Communication Engineering and Department of CSE/IT, JUIT, Solan hass organised a Workshop on Image Processing with Deep Learning between 22nd - 26th March 2022. Deep Learning networks on Image Processing finds its application in biomedical, forensic science, remote sensing, agriculture, and in many more. Due to its wide area of applications, it attracts students, researchers, educators and industrialists from different backgrounds like Electronics and Communication Engineering, Computer Science Engineering, Biotechnology and Bioinformatics Engineering and others. This workshop was organized with the aim to help the participants working or intend to work in the area of computer vision, biomedical engineering, forensic analysis, remote sensing images and telemedicine; and to help the participants to explore the new dimensions for their academic and research activities.

Workshop was conducted in hybrid both (both Offline and Online Mode). All the lectures were delivered remotely by keynote speakers, whereas hands-on sessions were conducted by experts in the Lab. All the sessions were made available through googlemeet for the Online Participants

A total of 373 participants had registered for this workshop. We had received registrations from India and globally from countries like Australia, Denmark, and South Africa. Among the registered participants, 180 were Faculty, 67 were research Scholars, 31 were PG students, 9 registrations were from Industry, 5 were scientists and the remaining registration were UG students. Participants affiliated from premium institutes like Queensland University of Technology, University of Johhanesburg, IIT Bombay, IIT Rookee, NIT Raipur, NIT Srinagar, IIIT Allahabad, DTU, and NSUT Delhi had registered in the workshop. Some participants were from companies like Bharti Airtel, Philips Health Care, HFCL Limited, etc.

In the workshop to clarify the fundamentals, we had 4 lectures on the fundamentals of image processing and deep learning along with 4 hands-on sessions. We also had 5 lectures on research topics that helped the participants to implement the concepts of image processing and deep learning in their area of interest. All the handon session were conducted on Google Colab platform.

Feedback was collected from the participants after every session of the workshop. At the end of the workshop 118 participants with more than 80% attendary were given the

e-Certificates. e-Certificate were also given to our keynote speakers as a token of appreciation.

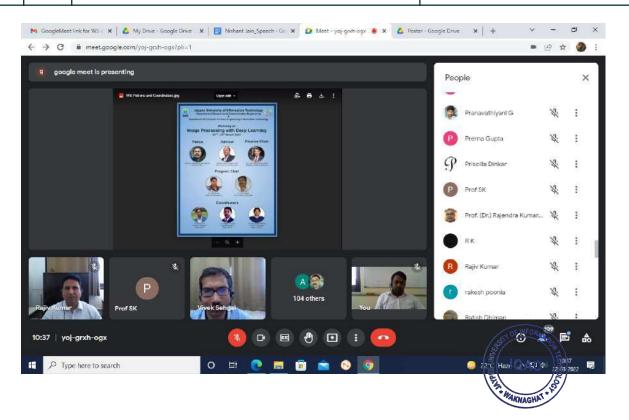
Dr. Nishant Jain, Assistant Professors in ECE, JUIT; Dr. Emjee Puthooran, Assistant Professors in ECE, JUIT and Dr. Vipul Kumar Sharma, Assistant Professors in CSE/IT, JUIT were the coordinators for this workshop.

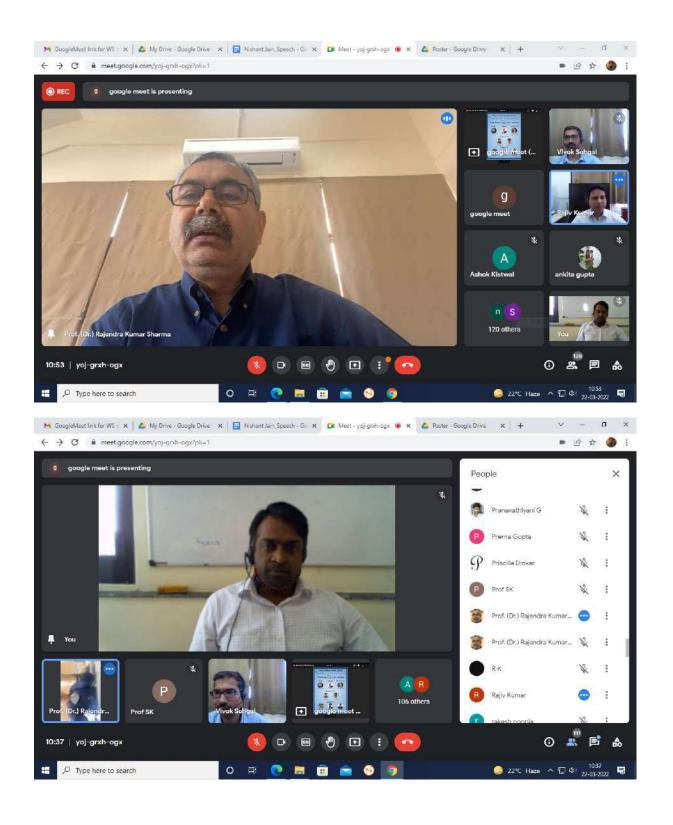
Schedule and weblinks of the Recordings and Materials (speakers allowed to share) of all the lectures and hands-on sessions conducted in the Workshop on Image Processing with Deep Learning 2022 is as follows:

		Schedule	Recorded Lecture and Supported Files
	10:30	Inauguration	
Day 1	11:00		
22 <sup>nd</sup>	11:00	Lecture: Introduction to Image Processing and its Applications	https://youtu.be/Ekfzeta3T8I
March	12:00	<b>Keynote Speaker</b> : Dr. Nishant Jain, Assistant Professor, Department of ECE, JUIT	
(Tuesday )	12:00 -13:0 0	Lecture: Deep Learning for Computer Vision Keynote Speaker: Dr. Subrahmanyam Murala, Associate Professor, Electrical Engineering Department, IIT Ropar	https://drive.google.com/file/d/1cOQhN 5iUSgfH2Qa8vdHkNg1bzYriQ14g/view? usp=sharing
	13:00	Lunch	
	14:30 -16:3 0	Hands-on Session: Implementation of Image Processing using Python.  Expert: Dr. Nishant Jain, Assistant Professor, Department of ECE, JUIT	https://youtu.be/7TxUQXD7w3w https://github.com/nishantjain86/lmage -Processing
Day 2	10:15 -11:1 5	Lecture: Feature Extraction Methods for the classification of images.  Keynote Speaker: Dr. Nishant Jain, Assistant Professor, Department of ECE, JUIT	https://youtu.be/wYZzpE1pPn0
Day 2 23 <sup>rd</sup> March	11:15 - 11:30	Tea Break	
(Wednes day)	11:30 -12:3 0	Lecture: Application of Deep Learning Networks on Medical Images. Keynote Speaker: Dr. Narendra D. Londhe, Associate Professor, Electrical Engineering Department, NIT Raipur	https://drive.google.com/file/d/1tMgQN ZehhXfzvYlgvM8Rnc3_THJ1OZPx/view ?usp=sharing
	12:30 - 14:00	Lunch	OF INFORMATO

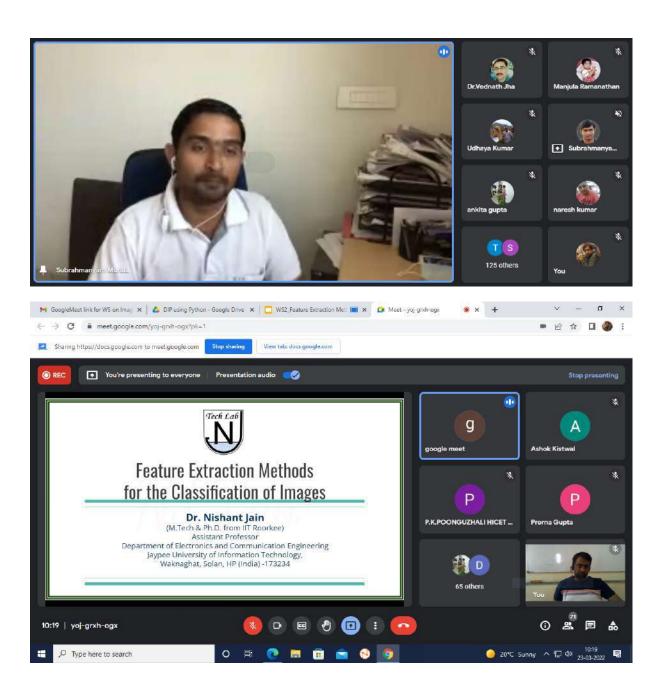
		·	
	14:00 -16:0 0	Hands-on Session: Feature Extraction methods and training of Neural Network using Python.  Expert: Dr. Nishant Jain, Assistant Professor, Department of ECE, JUIT	https://youtu.be/wIEaHjqifIA  https://github.com/nishantjain86/Image -Processing
Day 3	10:15 -11:1 5	Lecture: Feature Extraction and Classification of Liver Ultrasound Images Keynote Speaker: Dr. Jitendra Virmani, Senior Technical Officer, Indo-Swiss Training Centre (ISTC), CSIR-CSIO	https://drive.google.com/file/d/1jA2lfsj0 usLGdK3jwWIFf9ppOE9goX3S/view?u sp=sharing
March (Thursda	11:15	Tea Break	
y)	11:30		
	11:30 -12:3 0	<b>Lecture:</b> Image Compression using Machine Learning <b>Keynote Speaker:</b> Dr. Emjee Puthooran, Assistant Professor, Department of ECE, JUIT	https://drive.google.com/file/d/1jA2lfsj0 usLGdK3jwWlFf9ppOE9goX3S/view?u sp=sharing
	12:30	Lunch	
	- 14:00		
	14:00 -16:0 0	Hands-on Session: Implementation of Machine Learning Algorithms using Python Expert: Dr. Vikas Baghel, Assistant Professor, Department of ECE, JUIT	https://drive.google.com/file/d/16hElzB _VyaWgBGPHBYqo_vAYCfm-rlfk/view? usp=sharing
			Task1: https://colab.research.google.com/drive/1ryes3HAgjhoxuHYhm1Z-CdN3oN3p7fEF?usp=sharing
			Task2: https://colab.research.google.com/drive/1h5ylt9cK6fDepo9XwE1NUToAlHNc0ons?usp=sharing
			Task3: https://colab.research.google.com/driv e/1IKli0RZP1ZPtV9hP5Yct8kOZK1allm Bg?usp=sharing
Day 4 25 <sup>th</sup> March	10:15 -11:1 5	Lecture: Introduction to Convolutional Neural Networks Keynote Speaker: Dr. Vipul Kumar Sharma, Assistant Professor, Department of CSE/IT, JUIT	https://drive.google.com/file/d/1G-w2K T1Ja2qX7DhbjH_SYdNrt4B26f2V/view? usp=sharing
(Friday)			https://docs.google.com/presentation/ d/1gtcTJQSf1eqSfrMmqPnrL5oQXiYPp FFi/edit?usp=sharing&ouid=110182110 977450671877&rtpof=true&sd=true
	11:15	Tea Break	
	- 11:30		
	11:30 -12:3 0	Lecture: Automatic Radiology Report Generation using Deep Learning Keynote Speaker: Dr. Chandresh Kumar Maurya,	https://drive.google.com/file/d/1G-w2K T1Ja2qX7/200 H_SWNrt4B26f2V/view? usp=sharing
			*MANAGHAT *

		Assistant Professor, Computer Science & Engineering Department, IIT Indore	
	12:30 -13:1 5	Lecture: Application of AI and Image processing for Defence Systems Keynote Speaker: Dr. Anita Singh, Scientist 'E', IRDE, DRDO, Ministry of Defence, Govt. of India, Dehradun	https://drive.google.com/file/d/1awrOQ EzB 5eRG LXy-G-fbwESyb1x2yZ/view ?usp=sharing
	12:30 - 14:00	Lunch	
	14:00 -18:0 0	Trip to Shimla	
Day 5  26 <sup>th</sup> March (Saturda y)	10:15 -12:3 0	Hands-on Session: Implementation of CNN using python along with Dimensionality reduction, and feature Engineering Expert: Dr. Vipul Kumar Sharma, Assistant Professor, Department of CSE/IT, JUIT	https://drive.google.com/file/d/1oA5_6d 4wau1vAwHHLEtivblkbBRDeax5/view? usp=sharing https://drive.google.com/file/d/1mCcjZ pOvaSep4wny3f8Z0qLN_4ZiPoeJ/view ?usp=sharing https://drive.google.com/file/d/1ydE8M KqqHiyWvHDPsix4dRnc9eei8gXs/view ?usp=sharing https://drive.google.com/file/d/1yhcOk UGHFe2Qcy8tPhuxCRT8NQGJWCHd/v iew?usp=sharing
	12:30	Valedictory followed by Lunch	
	- 14:00		

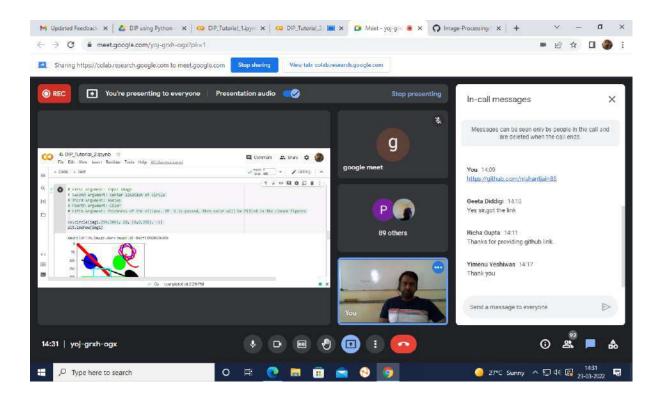


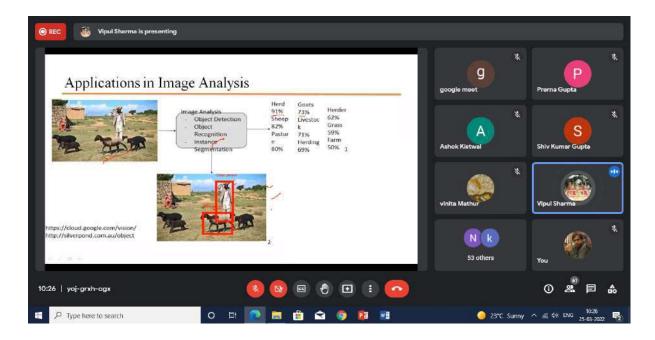




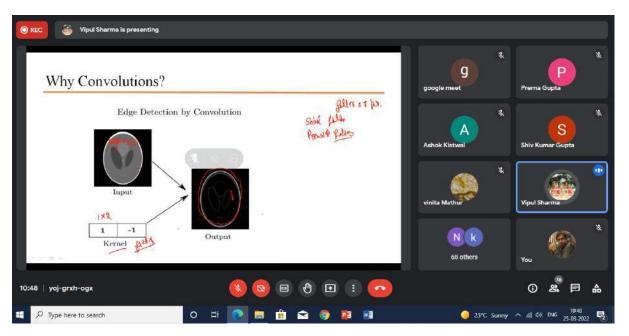


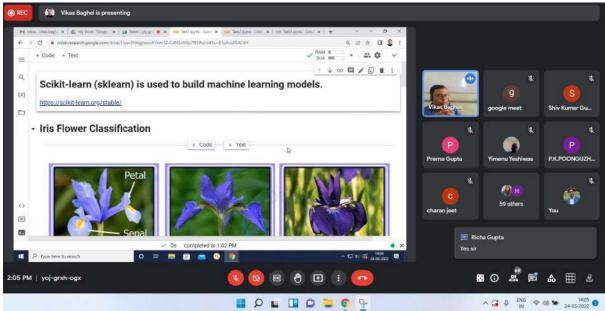














# Jaypee University of Information Technology Department of Electronics & Communication Engineering



Workshop on Image Processing with Deep Learning (22nd - 26th March 2022)



# Keynote Speaker

Title: Implementation of Machine Learning
Algorithms using Python



Dr. Vikas Baghel
Assistant Professor
Department of ECE, JUIT

Date: 24th March, 2022, Time: 14:00 - 16:00 IST

Medium: Google Meet





## Fw: Re: Moodle Implementation - BTBI

2 messages

saurabh.bansal@juit.ac.in <saurabh.bansal@juit.ac.in>

To: nishant.jain@juitsolan.in

4 June 2023 at 12:39

----Forwarded by saurabh.bansal/Juit on 06/04/2023 12:39PM ----

To: all\_faculty\_bibt@juit.ac.in From: raj.kumar/Juit Date: 12/28/2021 11:14AM

Subject: Re: Moodle Implementation - BTBI

Gentle Reminder.

Dr. Raj Kumar, Ph.D. Assistant Professor (Grade-I),

Department of Biotechnology and Bioinformatics, 2nd Floor, Vivekananda Bhawan, Jaypee University of Information Technology, Waknaghat, Solan - 173 234 Himachal Pradesh, India Phone: 01792 - 239351-Extension:305, +917876254267

-----raj.kumar/Juit wrote: -----| To: all\_faculty\_bibt@juit.ac.in

From: raj.kumar/Juit
Date: 12/24/2021 12:50PM

Subject: Re: Moodle Implementation - BTBI

Dear All,

As per directions of our HoD Sir, I will conduct Second Demo for Moodle activity.

1. Uploading class lecture material: Completed on 20.11.2021

2. Creating and evaluating Quizes: Pending

The Second Demo is scheduled on coming Tuesday, 28.12.2021 at 3:30PM.

Google Link: https://meet.google.com/yjd-scch-cxo

Regrds,

Dr. Raj Kumar, Ph.D.

Assistant Professor (Grade-I),

Department of Biotechnology and Bioinformatics, 2nd Floor, Vivekananda Bhawan, Jaypee University of Information Technology, Waknaghat, Solan - 173 234 Himachal Pradesh, India Phone: 01792 - 239351-Extension:305, +917876254267

----raj.kumar/Juit wrote: -----

To: all\_faculty\_bibt@juit.ac.in From: raj.kumar/Juit

Date: 11/22/2021 09:41AM

Subject: Re: Moodle Implementation - BTBI

Dear All

Please find recorded session of Moodle Demo-1.

https://drive.google.com/file/d/1y3kjlj7heEf6To622i1shAvazWcpdqxC/view?usp=sharing

Dr. Raj Kumar, Ph.D.

Assistant Professor (Grade-I),

Department of Biotechnology and Bioinformatics, 2nd Floor, Vivekananda Bhawan, Jaypee University of Information Technology, Waknaghat, Solan - 173 234 Himachal Pradesh, India Phone: 01792 - 239351-Extension:305, +917876254267

----raj.kumar/Juit wrote: -----

To: all\_faculty\_bibt@juit.ac.in From: raj.kumar/Juit Date: 11/17/2021 09:51AM

Subject: Re: Moodle Implementation - BTBI

Dear colleagues,

I hope that you have logged into your MOODLE account and changed your password.

As per directions of our HoD Sir, I will conduct two Demos for Moodle activities as follows:

- 1. Uploading class lecture material.
- 2. Creating and evaluating Quizes.

The first Demo is scheduled on coming Saturday, 20.11.2021 at 3:30PM.

Google Link: https://meet.google.com/yjd-scch-cxo

You may explore more using following useful links:

https://www.youtube.com/watch?v=n3uitciAhjw https://docs.moodle.org/311/en/Working\_with\_files

https://www.ispringsolutions.com/blog/getting-started-with-moodle



Best Regards, ~~Rai

Dr. Raj Kumar, Ph.D.

Assistant Professor (Grade-I),

Department of Biotechnology and Bioinformatics, 2nd Floor, Vivekananda Bhawan, Jaypee University of Information Technology, Waknaghat, Solan - 173 234 Himachal Pradesh, India Phone: 01792 - 239351-Extension:305, +917876254267

----raj.kumar/Juit wrote: ----To: all\_faculty\_bibt@juit.ac.in From: raj.kumar/Juit Date: 10/18/2021 05:32PM

Subject: Moodle Implementation - BTBI

Dear all,

University ranking bodies such as NIRF specify upto 30% weightage for 'Teaching-learning & resources (TLR)'. A learning management system (LMS) comes under the category of TLR and forms integral part of a modern education system globally. Moodle is a free and open-source learning management system which can be customized by any Institution and uses local hardware and networking.

#### The committee:

Recently, a 'Moodle Implementation Committee' has been formed which is headed by the honorable vice chancellor (VC), Prof. (Dr.) Rajendra Kumar Sharma. This Committee includes faculty representatives from each department and the members of IT team. The Committee is dedicated for the complete implementation of Moodle at JUIT before the beginning of upcoming semester starting January, 2022. I, Dr. Raj Kumar, am representing the Department of Biotechnology & Bioinformatics (BTBI) and will monitor the progress of Moodle implementation in the department.

#### Implementation:

- 1. Moodle space has been created on the main JUIT website at the following link: http://moodle.juit.ac.in:81/moodle/
- 2. The IT team will create your account and share the Login details with you via email.
- 3. You must Login and change your password at the first Login itself.
- 4. You must share the details of your course including 'course name, course code, and batches' in the course with the IT team.
- 5. IT team will create respective cohorts for each subject into which you may upload the class materials.
- 6. Starting upload activity.

#### Activity:

**1. Upload every class lecture material**, e.g. PPTs, video lecture, important links, other e-resources containing related NPTEL lectures. This practice is similar to the activity we already are performing in 'Google Classroom'.

#### Useful links:

https://www.youtube.com/watch?v=n3uitciAhjw https://docs.moodle.org/311/en/Working\_with\_files https://www.ispringsolutions.com/blog/getting-started-with-moodle

## 2. Creating and starting class Tutorials and Quizes.

You must create quizes in the respective courses only. Students must join the Moodle courseroom, perform the quiz and submit it there only (Similar practice as Google forms and Mettl).

#### Useful links:

https://docs.moodle.org/27/en/Building\_Quiz https://www.ispringsolutions.com/blog/how-to-create-a-moodle-quiz

#### Creating Simple Quizes:

https://www.youtube.com/watch?v=GqIECZJD4fE&ab\_channel=Moodle https://www.youtube.com/watch?v=CevOZV5Y9vg&ab\_channel=KateHayden

#### Creating Quizes, different types of questions

 $\label{lem:https://www.youtube.com/watch?v=gCm-LBMJgdg&t=1359s&ab\_channel=RussellStannard%28TeacherTrainingVideos%29 \\ \label{lem:https://www.youtube.com/watch?v=ErgH6\_G5Ofs&ab\_channel=RussellStannard%28TeacherTrainingVideos%29 \\ \label{lem:https://watchannel-RussellStannard%28TeacherTrainingVideos%29 \\ \label{lem:https://watchannel-RussellStannard%29$ 

#### How To Import A Quiz From Word Document To Moodle

https://www.youtube.com/watch?v=iLPVsqJYjzk&t=514s&ab\_channel=FacultyWorkshop

You may explore above links before the actual implementation.

For more information, you may contact me between 3-5pm on Mondays and Tuesdays.

#### Best Regards,

Dr. Raj Kumar

Dr. Raj Kumar, Ph.D.

Assistant Professor (Grade-I),

Department of Biotechnology and Bioinformatics, 2nd Floor, Vivekananda Bhawan,

Jaypee University of Information Technology, Waknaghat, Solan - 173 234

Himachal Pradesh, India Phone: 01792 - 239351-Extension:305, +917876254267



4 June 2023 at 12:41



## Workshop on Moodle platform

1 message

Emjee Puthooran <emjee.puthooran@juitsolan.in>
To: all\_faculty\_ece <all\_faculty\_ece@juitsolan.in>
Co: Rajiv Kumar <rajiv.kumar@juitsolan.in>, Sunil Datt Sharma <sunildatt.sharma@juitsolan.in>

26 October 2021 at 15:14

Dear Sir/ Madam,

As the University is planning to introduce Moodle, which is an open source learning management system (LMS) from next semester onwards, an online workshop is being organized on 28-10-2021 at 4:00 PM. You are requested to make it convenient to attend the same.

Google meet link: https://meet.google.com/skj-fzia-dky

With Best Regards, Dr. Emjee Puthooran Assistant Professor (SG), ECE JUIT Waknaghat, Ext: 243

IQAC PERMANDOL TECHNOLOGY

Reply Reply To All **Forward** More New

#### FIRE SAFETY TRAINING DEMONSTRATION

registrar

Monday, June 06, 2022 09:26AM

**Show Details** 

Dear All

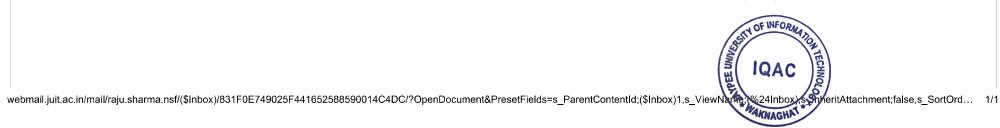
Fire Safety Training demonstration will be conducted by JUIT Fire Consultant on 08 June 2022 at 1215 hours in the area of Mughal Garden. All Faculty and Staff are required to be kindly present for the same.

Regards

Major General Rakesh Bassi, SM (Retd) Registrar and Dean of Students

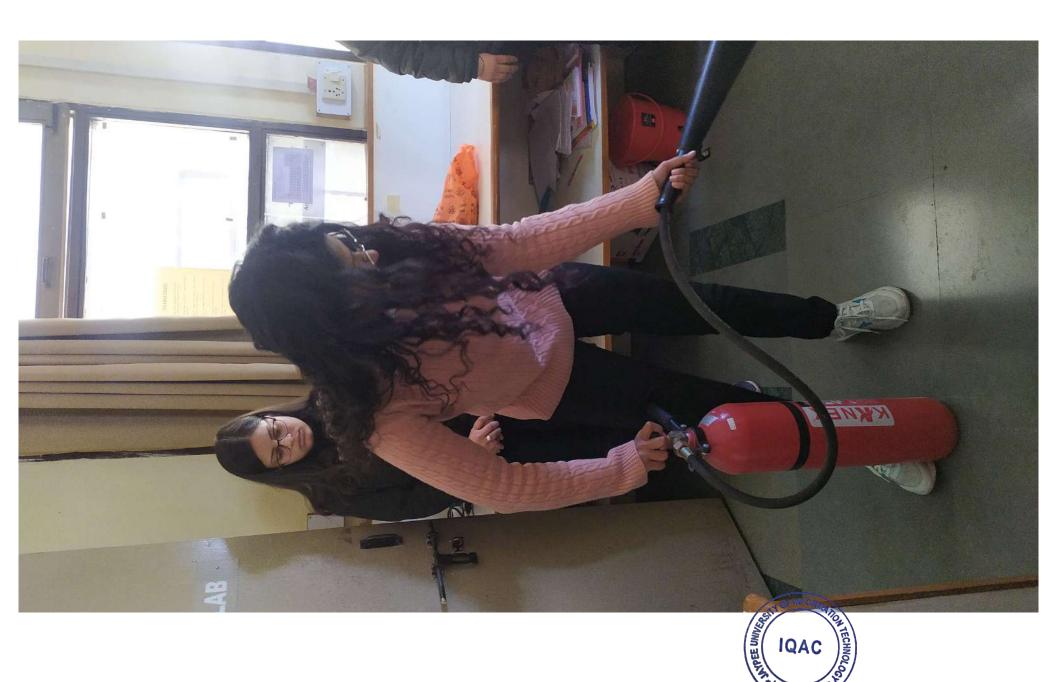
Office 01792-239203 Mob 8626816777

To: juit\_all@juit.ac.in













## Workshop Report on "Environment and Sustainability"

Dept. of Biotechnology, JIIT, Noida, and Dept. of Biotechnology and Bioinformatics, JUIT jointly organized a workshop on "Environment and Sustainability". The workshop was scheduled on June 9th, 2022, at Aryabhatt Bhavan III (JIIT) and Board Room (JUIT). Dr. Garlapati Vijay Kumar served as the coordinator for the workshop for JUIT and Dr. Indira was coordinator from JIIT. The program was started with the welcome speech by Prof. S.C. Saxena (Pro-Chancellor, JIIT), followed by Prof. B.R. Mehta (Director, DIRD, JIIT), Prof. Pammi Gauba (HOD, BT, JIIT) and Prof. Sudhir Kumar (HOD, BT & BI, JUIT). After that, Prof. Sunil Khare (IIT Delhi) gave a technical speech on "Extremophiles in Biotechnology," followed by the technical sessions of Dr. Sudesh Kumar (CIAB, Mohali) on "Sustainable approaches in Agri-Food Sector" and Prof. S.K.Soni (Punjab University, Chandigarh) on "Recent Trends in Biofuel/Bioenergy". The afternoon session started with the research talks by Prof. S. Krishna Sundari (JIIT), Dr. A.Mathur (JIIT), Prof. Sudhir Kumar (JUIT), and Dr.Garlapati Vijay Kumar (JUIT) on the frontier sections on "Environment and Sustainability". The program was concluded with the discussion and outcomes by Prof. Pammi Gauba (HOD, BT, JIIT) and Prof. Sudhir Kumar (HOD, BT & BI, JUIT) for possible research collaborations between sister institutions (JUIT & JIIT). participants, including Faculty Members (JUIT & JUIT), Research Scholars (JUIT & JIIT), M.Tech, B.Tech, and M.Sc. students have participated (Offline and Virtual modes) in this workshop.

The deliberations helped JIIT and JUIT faculty for near future collaborations in research ventures in the field of Environment and Sustainability.











# DBT Sponsored Third One Week National Workshop on Statistical Techniques in Biological and Medical Sciences STBMS-2022

Interactive Lectures & Lab sessions by Experts On Statistical Tools, Techniques and Their Applications

JUNE 17-23, 2022

## **ABOUT THE WORKSHOP**

Biostatistics has become a defined branch of science that uses an intricate combination of Statistics, Probability, Mathematics and Computation to model and solve real life problems in biological and biomedical sciences. As a discipline designed to yield information, biostatistics may also be considered as a highly-developed stream which in turn forms part of the developing and expanding field of bioinformatics. Consequently, biostatistics draws quantitative methods from fields including statistics, operations research, economics, and mathematics in general applied to research questions in fields such as public health (including epidemiology, nutrition, environmental health, and health services research), genomics, proteomics, population genetics, medicine, and ecology. Research in medicine and public health has beneficiary of this new methodology and a source of new problems. It is anticipated that this workshop will help biologists biotechnologists, biomedical scientists and students from all these streams to gain insight into statistical analyses. It will also help engine and public health as the biologists of the problems of their academic and research activities.

## **OUR SPEAKERS**



PROF. (DR.) AMAR NATH GILL Professor Department of Statistics IIIT, Una, Himachal Pradesh



PROF. (DR.) SURESH SHARMA Professor Department of Statistics Panjab University, Chandigarh



PROF. (DR.) NAVIN SINGH Principal Indian Military Academy, Dehradun, Uttarkhand

## **REGISTRATION FORM**

CLICK HERE (https://forms.gle/qNNdKBVKucRHmZuQ8) to register and apply CLICK HERE (STBMS\_2022\_Brochure.pdf) to download Information Brochure

APPLICATION PROCEDURE

Submit your registration after paying the fee. Send email for any query at: stbms2022@juitsolan.in Last date of submission of May. 31. 2022. May, 31, 2022.



Registration fee includes all working lunches/tea during the program and registration kit along with study material. Accommodation on sharing basis in JUIT hostels will be facilitated subject to availability.

## REGISTRATION FEES AND ACCOMODATION

Participants	Fee without accomodation (Upto JUNE 09, 2022)	Fee with accomodation (Upto JUNE 09, 2022)
Student(UG/PG)	2500/-	5000/-
Research Fellows (PhD/Post doc)	3000/-	5500/-
Faculty	5000/-	7500/-
Industry/Others	6000/-	8500/-

## **TOPICS TO BE COVERED**

- \* Descriptive and inferential Statistics
- \* Correlation and Regression: Predictors Testing, MLR, Multicollinearity, Variance inflation factor (VIF), Logistic regression
- \* Cohort Case-control and Cross-sectional epidemiological studies
- \* Hypothesis Testing- Parametric and Non- Parametric
- \* Factor, Cluster and Principal Component Analysis (PCA)
- \* Survival analysis and Stochastic Modelling
- \* Clinical trial and dose response studies
- \* One-two and three way ANOVA, ANOVA with repeated trials
- \* CRD, RBD, LSD, IBD, BIBD, Factorial Designs
- \* Multiple comparison procedures
- \* Order Restricted Inference
- \* Case Studies on Biological and Biomedical Data
- \* Extensive exercise and learning on Excel, SPSS, and R

## **ORGANIZING COMMITTEE**





CHIEF PATRON

Prof. (Dr.) Rajendra Kumar Sharma

Vice Chancellor

JUIT



PATRON (Retd.) Maj Gen Rakesh Bassi Registrar and Dean of Students JUIT



PATRON
Prof. (Dr.) Ashok Kumar Gupta
Dean (Academic & Research)
JUIT



Program Chair
Prof. (Dr.) Rakesh Kumar Bajaj
Professor and Head
Department of Mathematics
JUIT



Prof. (Dr.) Sudhir Kumar
Professor and Head
Department of Biotechnology and
Bioinformatics
JUIT



Dr. Tiratha Raj Singh
Associate Professor
Department of Biotechnology and
Bioinformatics
JUIT



Coordinator
Dr. Neel Kanth
Assistant Professor (Senior Grade)
Department of Mathematics
JUIT



MODERATOR
Dr. Ragini Raj Singh
Associate Professor
Department of Physics and
Materials Science



MODERATOR AND SPEAKER Dr. Bhupendra Kumar Pathak



MODERATOR AND SPEAKER Dr. Saurabh Srivastava



TECHNICAL SUPPORT Mrs. Somlata Sharma

Lab Technician



JUIT Assistant Assistant Department of JUIT Professor (Senior Professor (Senior Biotechnology & Grade) Grade) Bioinformatics JUIT Department of Department of Mathematics Mathematics JUIT JUIT

VENUE

Jaypee University of Information Technology

Waknaghat, P.O. Waknaghat, Teh Kandaghat, Distt. Solan

(H.P.), India

PIN-173 234

Ph: +91 -1792-239344, +91- 1792 -239252

Fax -01792-245362

## **GET IN TOUCH**

### **Contact Details**

**n** - ........

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 (H.P.), India
 PIN-173 234



Fax: -01792-245362

Email: stbms2022@juitsolan.in





Site designed by Raj, Rohit and Siddhant, JUIT



## Science and Engineering Research Board

(a statutory body of the Department of Science & Technology, Government of India)

5 & 5A, LGF, Vasant Square Mall Sector-B, Pocket-5, Vasant Kunj, New Delhi – 110 070

## Brief report of the organized event

(Financial Assistance to Seminar / Symposia)

Date: 25-07-2022

SERB Sanction / File No: SSY/2022/000176

- Name of Academic Institution / University / Society etc. under whose auspices the Seminar / Conference / Workshop / Symposium etc. was organized: Jaypee University of Information Technology, Waknaghat, Solan-173234, HP
- 2. Title of the Seminar / Conference / Workshop / Symposium etc.: Statistical Techniques in Biological and Medical Sciences (STBMS-2022)
- 3. Duration / Period of the organized event: June 17-23, 2022
- 4. Grant Sanctioned: Rs. 50,000/-
- 5. Summary of the event (Max. 1000 Words):

#### **STBMS 2022**

## Day 1 Inauguration Report (17/06/2022)

Prof. Dr. Rajendra Kumar Sharma (Vice-Chancellor, JUIT), Maj Gen Rakesh Bassi (Retd.) (Registrar and Dean of Students), Prof. Ashok Kumar Gupta, Dean (Academics & Research) and Prof. Suresh Sharma (Guest of Honor) were the dignitaries in the workshop. Participants from various parts of the country joined the workshop which includes H.P, Punjab, U.P., Delhi and NCR, Jammu and Kashmir and Gujarat. Dr. Tiratha Raj Singh (Coordinator: STBM) mentioned the journey of the STBMS and CEHTI. Announcement of the grants received: from the Department of Biotechnology (DBT) and the Department of Science and Engineering (DST) to organize this workshop and mention of successful organization of STMBS 2016 and STBMS 2018 was there. Legacy of STBMS is now very well spread across the country.

Prof. Sudhir Kumar (HoD and Program Chair) introduced the Department of Biotechnology and Bioinformatics. Prof. Rakesh Kumar Bajaj (HoD and Program Chair) speak about the Department of Mathematics. Prof. Ashok Kr. Gupta discussed the importance of statistics. Maj Gen Rakesh Bassi (Retd.) speak about the JUIT academic and administrative process. Prof. Suresh Sharma (Guest of Honor) speaks about the statistics. He mentioned that statistics is the backbone of any field. It is widely used in various sectors and encouraged participants for interactive sessions.

Prof. Dr. Rajendra Kumar Sharma (VC) had spoken about the workshop and explained the importance of statistics and its interaction with emerging techniques such as machine learning, deep learning and artificial intelligence. He cherished this good initiative where two departments are jointly organizing the workshop. Lastly, Dr. Neel Kanth (Coordinator: STBMS) gave the vote of thanks the dignitaries and participants.

## Day 1: Lectures and Lab (Prof. Suresh K. Sharma) (17/06/2022)

**Prof. Suresh K. Sharma, PU, Chandigarh** described the mean, median, mode, standard deviation, categorical variable and continuous variable, Kurtosis, skewness of the data etc. Assignment to all the participants on the IBM® SPSS® software platform for statistical analysis, which includes a vast library of machine learning algorithms, text analysis, open-source extensibility, integration with big data, and seamless deployment into applications were given with a clear and attractive introduction to SPSS. Then all the participants performed various operations which they explored in the theory session.

## Day 2: Lectures and Lab (Prof. Suresh K. Sharma) (18/06/2022)

Logistic Regression, MLR, Odds ratio, risk ratio, and ROC curve were discussed. Correlations and their types such as Karl person, Spearman's Rank, Multiple (R²), Partial Correlation coefficients, Correlation ratio, and Non-linear correlations were discussed in detail along with the different types of scales and measures of association. Prof. Sharma described the Chi-square test etc. Then he described Nominal by nominal, Ordinal by ordinal, Nominal by ordinal, Nominal by interval, etc. Basic regression concept was described for example if the data has multi-collinearly the Ridge regression can be applied. Multiple concepts related to logistic regression were discussed. He has explained Cohort Case-control studies and Cross-sectional epidemiological studies. He demonstrated the True positives, True negatives, false positives, and false negatives. Then in a hands-on session with the data where he has shown different types of error calculations followed by the receiver operating curve construction.

## Day-3: One Day Excursion to Shimla (19.06.2022)

After two days of rigorous learning, a visit to Shimla for all the participants was organized. The participants have visited the Indian Institute of Advanced Studies, Shimla, a historical and heritage building and popular Mall road and Ridge Maidan of Shimla. They were very excited to see this attractive place. After that, they did the tracking and reach the Jakhu Temple which is a historical temple related to the Hindu lord Hanumana with 108 feet high statue of Lord Hanumana.

## Day 4: Lectures and Lab (Prof. Amar Nath Gill) (20.06.2022)

Prof. Gill has covered Correlation and association of attributes, Simple and multiple linear regressions, regression with dummy variables, and others. He also described the Principal Component analysis (PCA) and factor analysis. In the PCA, several examples were given. He calculated the PCA using SPSS and then participants practiced it. He has also shown how one can draw the screen plot using the SPSS. The participants calculated the PCA and did other analyses using SPSS and then the session ended.

## Day 5: Lectures and Lab (Prof. Amar Nath Gill and Dr. Tiratha Raj Singh) (21.06.2022)

Prof. Gill covered idea of multiple comparison procedures and pair-wise comparison with test & control and described proper ways to use these techniques. Prof. Covered Ranking and Selection Problems and Order restricted comparison procedures in great detail the also mentioned that these techniques have several applications in life sciences as well as biomedical data analysis. Since the

processes exhibit randomness and are generally quite complex, the processes need to be simulated to gather information about them.

Dr. Tiratha Raj Singh introduced R programming language to the participants. The participants installed the R and R studio software and practice the R exercise. The lab session has been assisted by Mr. Rohit Shukla. The students solved the exercise and enjoyed the R learning.

## **Day 6: Lectures and Lab (22.06.2022)**

Dr. Tiratha Raj Singh introduced bioinformatics in a very interactive lecture. He has introduced the central dogma of bioinformatics and importance of bioinformatics. Nowadays bioinformatics is a major field to solve biological problems. He has described the systems biology approach, genomics analysis using microarray analysis, structural bioinformatics approach, and others approaches to solve problems in biology.

Dr. Bhupendra Kumar Pathak covered various aspects of statistics such as Probability and Distribution: Random variables, probability mass functions, probability density functions, Binomial, Poisson's, and Normal distributions in good detail. The next session was taken by Dr. Saurabh Shrivastava who covered various tests such as Parametric tests Z, t, F, and Chi-square tests. The hands on lab session by Dr. Bhupendra Kumar Pathak covered various excel techniques to the students to apply statistics.

## Day 7: Lectures and Lab (23.06.2022)

The session by **Dr. Saurabh Shrivastava** covered Non-parametric tests, Sign test, Wilcoxon rank-sum test, Kruskal-Wallis test, Friedman test, and Run test followed by the lab session to ikplement all these techniques.

## Valedictory Function

Prof. Dr. Rajendra Kumar Sharma (Vice-Chancellor) felicitated organizing team which includes Dr. Tiratha Raj Singh, Dr. Neelkantha, Dr. Ragini Raj Singh, etc. Then Hon. VC sir addressed the participants and encouraged them to invent new ideas and suggested to work on them. Certificates were distributed to the external and internal participants by the VC and Dean of JUIT. The appreciation certificates were distributed by the registrar, JUIT to the organizing team.

(Convener Signature)

## **Participation Information:**

S. No	Participation in the event	Nos.
I.	Key-note speakers	5
II.	Senior Scientist	8
III.	Young Scientist	10 OF INFORMA
IV.	Postgraduate Students	12
V.	Undergraduate Students	2 ( IQAC )
VI.	Industry persons	- \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
VII.	Other category (Please specify each category)	5 (Doctors)
i		

<u>Photographs Section</u>: Please paste high resolution photographs in given spaces below or may be submitted directly on online / email in JPEG format.

## 1. Inaugural Session



## 2. General Photograph





## 3. General Photograph



## 4. General Photograph





(Convener Signature)