

Short Term Course
on
Recent Advances in
Signal & Image Processing

24th - 28th 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, Wagnaghat, H.P.

PATRONS

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

PROGRAMME CHAIR

- Prof. M. J. Nigam,
Head of the Department, Electronics and Communication Engineering (ECE), JUIT, Wagnaghat, (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
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- Dr. Sunil Datt Sharma, Mobile No. 9826868418
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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.



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 accredited 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, Wagnaghat)

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.

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: Wagnaghat Branch, Jaypee University of Information Technology, Wagnaghat
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 Wagnaghat 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:.....

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, Wagnaghat, 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	

List of key-note Speakers / Resource Persons:

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.)	Science of Heart Rate Variability (HRV)
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, Wagnaghat, 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, Wagnaghat and outside Jaypee University of Information Technology, Wagnaghat 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.



Valedictory Function



Group Photo and Tea Party

