

Electronics & ICT Academy IIT Roorkee

FACULTY DEVELOPMENT PROGRAM

on

"Pattern Recognition and Image Analysis"



In Association with

Department of Computer Sc & IT,
Bhaderwah Campus,
University of Jammu



May 25, 2018 - May 29, 2018

Experts from Academia

Dr. Partha Pratim
Roy
IIT Roorkee

Dr. Baij Nath
Kaushik
SMVD University

Supported by

Ministry of Electronics & Information Technology
Government of India

Venue



Lal-Ded Auditorium
Department of Computer Sc & IT,
Bhaderwah Campus,
University of Jammu

Why Pattern Recognition and Image Analysis?

Pattern recognition and image analysis have become inevitable for the growth and development of new and emerging scenarios of Computer Engineering Sciences. It is so pervasive today that you probably use it dozens of times a day without knowing it. Its techniques are becoming indispensable and it holds great potential in the field of computer vision, image processing, medical imaging, natural language processing, speech processing etc. This course will help you to learn about the most effective techniques and gain practice implementing them and getting them to work for yourself. More importantly, you'll learn about not only the theoretical underpinnings of learning but also gain the practical know-how needed to quickly and powerfully apply these techniques to new problems. You would also acquire the skills needed to work with the problems of kernel-based learning, ensemble learning, supervised learning algorithms and fuzzy logic concepts.

Objective of the Course

- Introduction of Pattern Recognition.
- Understanding of various state-of-art techniques in image/signal analysis.
- Knowledge and hands-on training of various software for pattern recognition and image analysis.
- Introduce real-life applications of the pattern recognition and image analysis.

Program Features

- The program is split into lectures and labs/hands-on sessions.
- Hands-on experience on basic and advanced-level topics.
- Interaction & learning with experts from academia & industry.
- Certificates to participants by E&ICT Academy IIT Roorkee.

Focus Areas

- Introduction to Pattern Recognition.
- Image Analysis and Pattern Recognition.
- Kernel-based learning, ensemble learning.
- Adaptive Linear NN, Multiple Adaptive NN, Back Propagation NN.
- Introduction to Genetic Algorithms.
- Dimension Reduction Algorithms.
- Linear Classifiers and Deep Learning.
- Fuzzy Logic Concepts, Fuzzy Membership, with Fuzzy operations.
- Hands-on session on Supervised Learning Algorithms, Image Processing and PR.
- Hands-on session on Neural Networks and Fuzzy using C/Python.



Benefits and Outcomes of the Course

- Learning of basic knowledge in the area of pattern recognition and image analysis.
- Hands-on experience in working with different software in image analysis.
- Understanding of using pattern recognition techniques for digital, medical and satellite imaging.

Coordinators from IIT Roorkee

- Dr. Sanjeev Manhas, PI, E&ICT Academy, IIT Roorkee
- Dr. Partha Pratim Roy, CSE Dept., IIT Roorkee

Coordinators from University of Jammu

- Prof. GM Bhat, Hon'ble Rector Bhaderwah Campus, University of Jammu-Patron
- Dr. Jatinder Manhas, CS & IT Dept. University of Jammu- Convener
- Dr. Abid Sarwar, CS & IT Dept. University of Jammu-Organizing Secretary

Who Can Attend ?

Program is open to faculty members/research scholars/PG students from colleges/universities, and industry personnel working in the concerned/allied discipline.

Registration Fee

Faculty members: ₹ 2,500/-

Research scholars: ₹ 2,500/-

Persons from Industry: ₹ 3,000/-

Payment Details

DD in favor of "Dean SRIC IIT Roorkee" payable at Roorkee
"OR"

Make Online Payment by NEFT/RTGS on given detail

Account Name: Research Project, IIT Roorkee

Account Number: 33012172097

IFSC code: SBIN0001069

How to Apply

Step 1: Participants may fill the registration form available on the link "Apply Here" for the relevant course on eict.iitr.ac.in

Step 2: Make Payment

OR

Step 3: Send a duly filled-in registration form along with Demand Draft to Academy address.

Mr. Prateek Sharma, EICT Academy, ECE Department, IIT Roorkee-247667

Important Dates

**Last Date For Online
Registration :
21st May 2018**

EICT Academy IITR

Electronics and ICT Academy (E&ICT) at IIT Roorkee (funded by Ministry of Electronics and Information Technology) aims to enrich and upgrade teaching and research competences of engineering faculties of institutes/colleges by conducting courses and workshops in fundamentals as well as emerging areas of E&ICT and enabled areas. The programs are conducted by well-known industry partners, resource persons from leading academia and experts from renowned R&D organizations.



Activities of the Academy

- Specialized training on basic and advanced level topics with hands-on experience in the emerging areas of Electronics & ICT.
- Setup the activity centers to conduct FDPs locally at institutes/colleges.
- Curriculum development for the industry.
- Continuing Education Programme for students/working professionals.
- Design, develop and delivery of specialized modules for specific research areas in industry.

Faculty Development Program

on

Pattern Recognition and Image Analysis

May 25 - May 29, 2018

REGISTRATION FORM



Applicant Name _____

Gender: _____

Category (GEN/OBC/SC/ST): _____

Designation: _____

Name and Address of the
Organizatio/Institute: _____

City/Town: _____

Email: _____

Phone Number: _____

Do you need Accommodation?
(Yes/No): _____

DD Number: _____

Date: _____

Issuing Bank: _____

Payable at: _____

Signature of the Applicant

Contact Us

Electronics and ICT Academy, IIT Roorkee

Roorkee - 247667, (Uttarakhand) INDIA

Ph. +91-9697436894,+91-8082770939,

+91-1332-28 6457, +91-7078627392

Email: eict@iitr.ac.in, eictiitr@gmail.com

Website: <http://eict.iitr.ac.in>



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