



Machine Learning Application in Signal Processing and Communication Engineering

3rd – 8th January 2022



Chairman, Advisory Board, EICT Academy &
Director MNIT Jaipur
Prof. A. P. S. Rathore

Honorary Academic Chair, EICT Academy
Prof. V. Sinha

Chief Investigator, EICT Academy
Prof. Vineet Sahula, ECE

Co- Chief Investigators, EICT Academy
Prof. Lava Bhargava, ECE
Prof. Pilli Emmanuel Shubhakar
Dr. C. Periasamy, ECE
Dr. S. J. Nanda, ECE
Head, ECE (Prof. V. Janyani)
Head, CSE (Prof. D. Gopalani)

Preamble (Electronics & ICT Academy)
Government of India had announced a National Policy on Skill Development, which has set a target of skilling 500 million people by 2022 in the domain of Electronics & IT. Under the plan scheme of "Digital India Manpower Development". MeitY has set up seven (07) Electronics and ICT Academies as a unit in 03 IITs, 03 NITs and 01 IIIT with an objective of faculty/mentor development/up gradation in the areas related to Electronics & ICT leading ultimately to improved employability of graduates/diploma holders. MNIT Jaipur has set up such an academy for providing specialized training to faculty and industry persons in the states/UTs of Rajasthan, Gujarat, Daman & Diu, Dadra Nagar Haveli.

(A) Issues-

1. IT Hardware and Electronics Manufacturing industry- availability of properly trained, skilled and qualified manpower
2. Number of quality PhDs generated in IT / Computer Science is very low
3. In E & ICT domain- there is a very high degree of obsolescence of existing technologies and faster emergence of newer technologies

(B) Approach-

1. A focused faculty training/updation programme for IT, Electronics and related sectors
2. Spreading up and continuous updation regarding Emerging Technology
3. Training and consultancy services for Industry
4. Design, Develop and Deliver specialized modules for specific research areas and Industry
5. Providing advice and support for technical incubation and entrepreneurial activities

An intensive one-week online training programme is being organized for faculty of engineering and technological institutions. It is also open to persons from industry and doctoral students of Indian organizations. The main theme of training program will be oriented around exploring the machine learning application in Signal Processing and Communication Engineering.

Experts/Speakers-

- Prof. Ratnajit Bhattacharjee (IIT Guwahati)
- Dr. Suresh Sundaram (IIT Guwahati)
- Dr. Rhythm Grover (IIT Guwahati)
- Dr. Mitul Kumar Ahirwal (MANIT Bhopal)
- Prof. RBV Subramanyam (NIT Warangal)
- Dr. Debanga Raj Neog (IIT Guwahati)
- Dr. Irshad Ansari (IIITDM Jabalpur)
- Dr. Arghyadip Roy (IIT Guwahati)
- Dr. Ashish Anand (IIT Guwahati)
- Prof. M K Bhuyan (IIT Guwahati)
- Dr. Varun Bajaj (IIITDM Jabalpur)
- Dr. Amit Vishwakarma (IIITDM Jabalpur)
- Dr. Rakesh Kumar Jha (IIITDM Jabalpur)
- Dr. Satyasai Jagannath Nanda (MNIT Jaipur)
- Dr. Kuldeep Singh (MNIT Jaipur)
- Dr. Amit Mahesh Joshi (MNIT Jaipur)

Programme Modules:

- Introduction to ML application in Signal Processing and Communication
- ML in Speech, Image Processing, Gesture Recognition
- ML in Biomedical Signals
- ML in Resource Allocation in Wireless Networks, Energy-efficient Communication, Seismic Signal Processing
- ML for Cooperative Spectrum Sensing, Smart Health Care Systems

Joint Principal Coordinator

Dr. Satyasai J. Nanda sjnanda.ece@mnit.ac.in 9549654237 (M)

Participating EICT Academies : MNIT Jaipur, IIT Guwahati, NIT Patna, NIT Warangal, IIT Roorkee, IIITDM Jabalpur

Registration:

Registration is open to faculty, industry persons, doctoral, postgraduate and graduate students. Participants will be admitted on first-come first-served basis. Register on line at - http://www.mnit.ac.in/eict/acad_training_prg.php

Certification Fee:

Academic (student/faculty): Rs.500/-, Industry/Others in India: Rs.1000/-, Foreign Academics/Industries : Rs. 4000/-

- (A) Fee once paid will not be refunded back; it would be adjusted in future.
 - (B) The fee covers online participation in the programme, tutorial notes and examination, certification charges.
 - (C) The organizers should receive the registration amount through online payment gateway provided at the registration portal.
 - (D) For modules details, see separate sheet attached.
- For any other query, email us at academy@mnit.ac.in