



FACULTY DEVELOPMENT PROGRAMME (FDP)
ON
ADAPTIVE SIGNAL PROCESSING AND MACHINE INTELLIGENCE
4th June – 9th June 2018

Organized by
CMR INSTITUTE OF TECHNOLOGY
(UGC AUTONOMOUS)

Kandlakoya Medchal Road Hyderabad

In association with

National Institute of Technology, Warangal

Under the scheme of Electronics & ICT Academy

(Sponsored by MeitY, Govt. of India)



Preamble: "Electronics & ICT Academy at NIT Warangal provides specialized training to the faculty of Engineering, Arts, Commerce & Science colleges, polytechnics etc., by developing state-of-the-art facilities. It is working towards enhancing the domain expertise of interested faculties with special focus on the faculties of Southern States Telangana, Andhra Pradesh, Karnataka, and the Union territories Goa, Puducherry and Andaman & Nicobar Islands. The academy is involved in multitude of activities including training, consultancy and entrepreneurship programmes. The academy offers faculty development programs in standardized courses and emerging areas of Electronics, Information Communication Technologies; provides training and consultancy for industry, CEP for working professionals, apart from rendering advice and support for technical incubation

About the Workshop

In the era of knowledge-based society and machine automation, there is a strong interest in machine learning (ML) techniques in a wide range of applications. The attention paid to ML methods within the DSP community is not new. Speech recognition is an example of an area where DSP and machine learning have been combined to develop efficient and robust speech recognizers. Channel equalization is another area at the intersection of ML and DSP techniques. After all, deciding upon the transmitted information symbol is nothing but a class assignment task. In cognitive radio, DSP techniques and ML methods can work together for developing algorithms for the efficient utilization of the radio spectrum. Image/video/audio coding, recognition, and retrieval are some additional typical examples where DSP and ML tie together. Another problem at the heart of the DSP community interests is the regression task, which can be cast as an ML problem. Biomedical applications constitute another area in which mixed ML and DSP ideas proved to be useful. In this FDP, we will discuss the algorithms that are being proposed for signal processing with ML.

Major Course Contents:

- Introduction to Adaptive Signal Processing
- Adaptive Filters
- Cognitive Modeling
- Artificial Neural Networks
- Distance based Neural Networks
- Multi-layered Neural Networks
- Population based Search
- Bio Inspired Algorithms(Genetic and Bat inspired)
- Data analysis and Visualization
- Radar Signal Processing with MI/CNN
- Signal processing in Biomedical Applications
- Speech processing applications.
- Case studies and Hands-on.

Faculty conducting this program: The program will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the program. Speakers from industries are also expected to deliver as part of the course.

Eligibility: The program is open to the Faculty of Engineering Colleges, MCA Colleges and other allied disciplines in India. Industry personnel working in the concerned /allied discipline can also attend.

Organized at: The programme will be coordinated and conducted by the electronics and Communication Engineering department of CMR Institute of Technology UGC Autonomous Kandlakoya, Hyderabad. The whole course will be accomplished by academicians from premier institutions, Industry experts and Research advisors

Accommodation: No TA/DA will be paid to the participants.. Working Lunch, Tea & Snacks and Dinner would be provided during the training at CMRIT campus.

Venue: Dept. of ECE, CMR Institute Of Technology Hyderabad.

Registration Fee Particulars:

Faculty and Research Scholars	Rs. 2500/-
Faculty of SC/ST Category	Rs. 1250/-
Industry Participants	Rs. 7500/-

*SC/ ST participants should submit the copy of their caste certificate to claim the concession along with application form and it is only for faculty. Research Scholars are not eligible for SC/ST concession.

The entire registration fee is to be collected in the form of DDs/online transfer using the following details:

DD Details	Online Transfer Details
Demand Draft in favor of "Director, NIT Warangal" payable at any bank in Warangal	Account Name: Electronics & ICT Academy NITW Account No: 62423775910 IFSC: SBIN0020149

How to apply: A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with demand draft) should reach the coordinator by speed-post. It is also mandatory to send scanned application form and demand draft through e-mail to nagaraja1609@gmail.com and ravikumar@nitw.ac.in as selection will be intimated only through mail. as selection will be intimated only through mail.

Selection Criteria:

Selection will be done based on *first-cum-first-serve basis* and the confirmed candidates will be notified immediately. The maximum number of participants will be 50 (fifty). Additionally 10 participants from industry are allowed to participate. The list of selected participants will be notified in the institute web site www.cmritonline.ac.in and also will be sent to their personal e-mail ids. In case a candidate is not selected, the demand draft will be sent back. A test will be conducted at the end of the course. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important dates:

Last date for submission of application	25.05.2018
Selection-list intimation/display before	31.05.2018

About NITW & CMRIT:

National Institute of Technology (formerly Regional Engineering College), Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institution imparting technical education of a very high standard leading to the B. Tech degrees in various branches of engineering and M. Tech. and Ph.D. programs in various specializations.

CMR Institute of Technology is one of the best engineering Colleges for aspiring engineering students. It is one of the three colleges established by MGR Educational Society. CMR Institute of Technology was established in 2005 with a single - minded aim to provide a perfect platform to students in the field of Engineering, Technology and Management for their academic and overall personality development. The College has a rich tradition of soaring high with academic excellence & overall personal growth of students. This is achieved by providing excellent academic environment and excellent infrastructure with the help of dedicated & highly qualified faculty members with M.Tech. and Ph.D. qualification and decades of experience. State of art infrastructure, includes labs with high quality equipment, rich collection of Library Books & IEEE, International, Indian journals and amenities. The college has well - equipped City Center for Faculty Development, Student Training and Placements Training Activities

FACULTY DEVELOPMENT PROGRAMME

APPLICATION FORM

ADAPTIVE SIGNAL PROCESSING AND MACHINE INTELLIGENCE

4th June – 9th June 2018

Organized by

CMR INSTITUTE OF TECHNOLOGY

(UGC AUTONOMOUS)

Kandlakoya Medchal Road Hyderabad

In association with

National Institute of Technology, Warangal

Under the scheme of Electronics & ICT Academy

(Sponsored by MeitY, Govt. of India)

1. Name:

2. Designation:

3. Institution:

4. Email:

5. DD No:

Bank:

Date:

6. Address for Correspondence

7. Educational Qualifications with specialization:

8. Subjects taught so far:

9. No. of refresher courses/workshops attended:

10. Experience (in years)

Teaching:

Research:

Industry:

11. Accommodation required: YES / NO

12. Are you belong to SC/ST: YES/NO

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Place:

Date:

Signature of the applicant

Coordinators

Dr. J. RAVI KUMAR

Department of ECE,

Electronics & ICT Academy

NATIONAL INSTITUTE OF TECHNOLOGY

SPONSORSHIP CERTIFICATE

Dr./Mr./Ms..... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on *Adaptive Signal Processing and Machine Intelligence* Sponsored by **Electronics & ICT Academy** during 4th - 9th June, 2018 at **CMRIT, Hyderabad.**

Place:

Date:

Signature of Head of Institution

(With seal)

Address for correspondence

Mr. Nagaraja Kumar Pateti

Coordinator

FDP on Adaptive Signal Processing and Machine Intelligence

Department of Electronics and Communication Engineering

CMR Institute of Technology, Kandlakoya,

Hyderabad-501401 Telangana, India

Mail the scanned copies of filled-in and duly signed application form with DD to, nagarajal609@gmail.com

jrk.nitw@nitw.ac.in

For more information visit: <http://nitw.ac.in/eict/>

<http://cmritonline.ac.in>

For any enquiry contact:

Mobile: 7416181853, 8332969363

Land line: 0870-2462444

Mr. NAGARAJA KUMAR KUMAR

ARISE President

Department of ECE,

CMR INSTITUTE OF TECHNOLOGY