ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)
ON
Applications of AI & ML in Signal Processing and Communications
(23rd June– 30th June 2022)
Organised by
Electronics & ICT Academy, NIT Warangal
In Association With
Electrical, Electronics and Communication Engineering Department
GITAM School of Technology, GITAM Deemed to be University, Vizag, Andhra Pradesh
(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

About the FDP:

The FDP on Artificial Intelligence (AI) for Communication and Signal Processing Applications focuses on providing an introduction on the impacts of Artificial Intelligence in the fields of communication and signal processing. AI techniques are widely used for many applications such as Wireless Communication, Bio-medical Imaging Processing, Computer Vision, Natural Language Processing, and so on. This course will give the basics and research areas of AI with applications to communication & signal processing. It will help to upgrade the expertise and capabilities of the faculty members of various engineering institutions in India. Experts cover a range of contemporary computing topics and provide with a strong theoretical basis, as well as develop critical analysis and practical skills. This FDP aims to impart knowledge and train on fundamentals of engineering aspects of AI and insights in recent communication & signal processing applications using AI.

Major Course Contents:

- Introduction to AI/ML and its applications.
- Mathematical foundations of machine learning for communication and signal processing.
- Feature Extraction, dimensionality reduction in ML
- ML based Regression, Classification and its applications.
- Machine learning based signal processing for software defined and cognitive radio.
- AI/ML for 5G/6GSystems.
- Potential limitations of AI solutions in Wireless Communications.
- Machine learning & Signal processing of large scale datasets and Communications.
- EEG Signal Processing, BCI systems and Applications.
- AI/ML for Biomedical Signal Processing/imaging, Image Processing and Computer Vision Applications.
- Basics of Tensor Flow/Keras/PyTorch/Jupyter.
- Working with data pre-processing and data visualization using Python/MATLAB.
- Hands-on session using Python/MATLAB.

Faculty conducting this programme:

The programme 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 programme. Speakers from industries are also expected to deliver as part of the course.

Registration Fee Particulars:

Faculty and Research Scholars	Rs.750/-
Industry Participants	Rs.2250/-

Participants need to pay the Registration Fee Online using the following details

Online Transfer Details
Account Name: **Electronics & ICT Academy NITW**
Account No: **62423775910**
IFSC: **SBIN0020149**
Bank and Branch: **State Bank of India, NIT (REC) Warangal**

How to apply:

Participants are required to fill the online registration form by clicking on the following link:

https://forms.gle/gYYNLLMMJRcrjSzv8

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. 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 (Application & DD)	20.06.2022
Selection List by E- mail	21.06.2022
Duration	23.06.2022 to 30.06.2022

About NIT Warangal:

National Institute of Technology, 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 Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About GITAM School of Technology, Visakhapatnam:

Gandhi Institute of Technology And Management popularly known as GITAM was founded in 1980 and led by Dr.M.V.V.S.Murthi former Member of Parliament and popular philanthropist is now led by Mr.M.Sri Bharat, a young educationalist & entrepreneur. GITAM School of Technology is one of the constituent Institute of the GITAM (Deemed to be University) and offers U.G courses in EECE (AI, IOT, VLSI, Smart grid, Communications Engineering), CSE(AI, DS, CS, IoT, CSBS), Bio-Tech(AI), Civil, MECH(Robotics, Automation, Electric & Hybrid vehicles, smart Manufacturing) and Postgraduate courses, Research programs.

The department of EECE is a constituent department in the GITAM School of Technology and was started in 1981. The department is well equipped with state-of-art Laboratories & offering two undergraduate programs in ECE, EEE and four postgraduate programs with specialization in VLSI Design, Embedded Systems, Power Systems & Automation, and Electronics Design & Technology (with CDAC, Hyderabad).

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1. Name :

2. Designation :

3. Institution :

4. Email :

5. Mobile No :

6.

Reference No:	
Amount:	
Bank :	
Date:	

7. Address for Correspondence:

8. Educational Qualification:

9. Subjects taught so far:

10. No. of refresher courses/workshops attended:

11. Experience (in years):

   Teaching: Research: Industry:

12. Do 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.

Date **Signature of the Applicant**

SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. .... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on **"Applications of AI & ML in Signal Processing and Communications"**, sponsored by **Electronics & ICT Academy** during **23rd June – 30th June, 2022** at GITAM School of Technology, GITAM Deemed to be University, Vizag, Andhra Pradesh.

Signature of Head of Institution
(with seal)

Address for correspondence

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GITAM Deemed to be University,
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It is requested to all the delegates, after completion of application form, all the payment details, screenshot of the payment and scanned application form has to be uploaded in the following online registration link.

Registration Link:

For more details about Electronics & ICT Academy, NIT, Warangal, please visit:
https://nitw.ac.in/eict

For more enquiries please contact:

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