



ONLINE FACULTY DEVELOPMENT PROGRAM (FDP)

ON

Artificial Intelligence and Machine Learning using for Signal Processing and Biomedical Applications

25th September - 29th September 2023

Organized by

CENTRE FOR TRAINING AND LEARNING, NIT Warangal

(Established under the PMMMNMTT Scheme, Ministry of Education, Govt. of India)

In association with

Department of Electronics and Communication Engineering

National Institute of Technology, Warangal

PREAMBLE

The Centre for Training and Learning (CTL) has been established at NIT Warangal with grants from the Min. of Education, through its scheme "Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)". Under this Scheme, a separate building has been built exclusively for the CTL activities, with the state-of-art training facilities that include a studio for production and uploading of video and e-lectures on various subjects of higher education, training halls to train the faculty in various theme areas of Science and Technology, Humanities and Social Sciences, Linguistics and Communication skills, Pedagogy and Cognition Evaluation, etc. among others. One of the important objectives of the Centre is to conduct training programs for the aspiring, newly inducted and in-service faculty in science, engineering, social sciences disciplines in higher education. Other activities of the CTL include preparation of print and e-learning materials, offering on-line courses, curriculum design, carrying out research in educational technology and pedagogy and integrating with ICT into teaching-learning process. The CTL has special programs of training for the marginalized and women-faculty.

ABOUT FDP

The Faculty Development Programme will help to disseminate the knowledge in the domain of AI and Machine learning with python for Biomedical and Engineering Applications and is being conducted at National Institute of Technology, Warangal. It empowers the participants to understand how AI can be used to innovate and improve the Medical, signal processing and engineering related applications. Machine Learning is a fast-growing field of Artificial Intelligence concerned with the study and design of computer algorithms for learning good representations of data, at multiple levels of abstraction. The topics will focus on basics, advances and applications to benefit people from academic and research communities associated with Science and Engineering. The whole course is handled by academicians and industry experts.

MAJOR COURSE CONTENTS

- Introduction to Artificial Intelligence, Machine Learning, learning methods, Data Science and Applications.
- Research in Machine Learning/Deep learning and Applications, various Deep Learning and CNN models.
- Feature Extraction/Selection, optimization Techniques, Computer Vision and Applications.
- AI/ML for Medical Image data classification, various Medical Image analysis and Applications.
- AI/ML for Signal processing applications
- Basics of Tensor Flow/Keras/Jupyter and data visualizations.
- Hands on sessions on Python/MATLAB.

FACULTY CONDUCTING THIS PROGRAM

The program will be conducted by the faculty members from NIT Warangal and Academicians in the concerned field from IITs/NITs/IIITs have been invited to deliver lectures in the program.

REGISTRATION FEE PARTICULARS

Faculty	Rs.1000/-
Students / Research Scholars	Rs. 500/-
Industry Participants	Rs.2000/-

Participants need to pay the registration fees online using the following details

Online Transfer Details

Account Name: **Head, CTL NITW**
Account No: **40376545007**
IFSC: **SBIN0020149**
Bank and Branch: **SBI, NIT(REC) Warangal**

HOW TO APPLY

Participants are required to fill the online registration form by clicking on the following link: <https://forms.gle/E4E1ZQMK7zSSfxX56>

SELECTION CRITERIA

Selection will be done based on first-come-first-serve to a maximum number of 100 (Hundred). The list of selected participants will be intimated through e-mail. In case the candidate is not selected, the registration amount will be refunded. Candidates will be issued certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

IMPORTANT DATES

Last date for Registration	22 th September, 2023
Selection List by E- mail	23 th September, 2023
Duration	25/09/2023 to 29/09/2023

ABOUT NIT WARANGAL

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 31 post-graduate programs besides doctoral programs. About 5000 students across the country and about 500 international students' study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure in the form of state-of-the-art library, seminar halls, guest houses and research laboratories.

COORDINATORS

Dr. Mohammad Farukh Hashmi and Dr. Amara Prakasa Rao
Assistant professor, Department of ECENIT Warangal

Associate Professor Department of ECENIT Warangal

Mail ID: mdfarukh@nitw.ac.in, aprao@nitw.ac.in

Ph. No: 6303817285, 8332969358

For more details, please visit: <https://www.nitw.ac.in/tlc/>