

ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP)



Artificial Intelligence and Machine Learning Applications

(1st - 10th July 2023)Organised by

Electronics & ICT Academy, NIT Warangal

in association with

Dadi Institute of Engineering & Technology, Anakapalle, Visakhapatnam (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:

This Faculty Development Programme will help to disseminate the knowledge in the domain of AI and Machine learning with Python for real time applications. It empowers the participants to understand how AI & ML can be used to innovate and improve the real time applications. With Artificial Intelligence one doesn't need to preprogram a machine to do some work, despite that one can create a machine with programmed algorithms that which can work with own intelligence. 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. Since data is overwhelming, organizations are struggling to extract the powerful insights they need to make smarter business decisions. The participants will be trained with hands-on approach to have an in-depth insight into the domain of AI & ML and expose them to Feasibility & future scope.

Major Course Contents:

- 1. Introduction to Artificial Intelligence, Knowledge Representation, Machine Learning, Deep Learning and Representation Learning
- 2. Research in AI-ML and Applications
- 3. Machine Learning with Feature Representation
- 4. Feature Selection and Ensemble Methods
- 5. Machine Learning Basics Linear Regression, Perceptron's, Multilayer Perceptron's, Stochastic Gradient Descent, Backpropagation
- 6. Basics of Python, Decision tress, Naive Bayesian Classification
- 7. KNN, Unsupervised Learning Methods, K-Means
- 8. Dimensionality Reduction Methods, PCA, GMM
- 9. Computer Vision Applications: Image Classification, Object Recognition and detection
- 10.Current Research Latest Architectures, Applications and Hands on Sessions and supervised and unsupervised Learning Methods

Resource Person for 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



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How to apply:

Participants are required to fill the online registration form by clicking on the following link: https://forms.gle/HSiBeuh5MaBfbt127

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)	29.6.2023
Selection List by E- mail	30.6.2023
Duration	1.7.2023 to 10.7.2023 Time: 11:00am to 1:00pm 2:00pm to 4:00pm

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 DIET:

Dadi Institute of Engineering & Technology (DIET) - NAAC 'A' Accredited Institute achieved excellence and became a forerunner of designing and initiating novel programmes that are relevant to the demands of technical trends. The developments, both in terms of infrastructure as well as academic matters, have gained momentum over the last seventeen years. Recently, DIET has been awarded as TOP RATED INSTITUTE with 4 star rating across India by Institution's Innovation Council, Ministry of Education, Govt. of India for consecutive years 2021 and 2022. DIET is one among the premier institutes to have an active International and National Professional bodies like IEEE, ISTE, IET, ACM, ISTE, CSI, Microsoft IT Academy, The Institution of Engineers, etc functioning potentially and DIET has been allotted as "Cambridge ESOL Examination Centre" by prestigious Cambridge University, UK. DIET has MoUs with reputed organizations like NRDC, ISRO, BSNL, EDUskills, APSSDC etc. as part of its industry connect to help student fraternity to up skill and have practical exposure to the developments in the field of science and technology and also to establish collaborative labs for major and minor projects. DIET has been awarded BAND PERFORMER in the ATAL RANKING OF INSTITUTIONS IN INNOVATION ACHIEVEMENT-ARIIA 2021 on 29th December, 2021 and ranked in band 151-300 in NIRF INDIA Rankings by AICTE & Ministry of Education, Govt. of India.

Coordinators

Dr. M. Srinivas

Ph.D. (IITH), Post-Doc (Academia Sinica, Taiwan and ETS, Canada) Computer Science and Engineering NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL - 506 004 (Telangana State)

Email: msv@nitw.ac.in Ph. No: 08897064421

Dr. K. Sujatha

Professor & HoD, Department of CSE Dadi Institute of Engineering & Technology (DIET), Visakhapatnam, Andhrapradesh, India - 531 002 Email: hodcse@diet.edu.in

Ph. No: 9963993228