



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON AI and Machine Learning for Biomedical Applications

(18th October – 27th October 2021)

Organised by

Department of Biotechnology

And

Department of Computer Science and Engineering

E & ICT Academy, NIT Warangal

(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 Faculty Development Programme will help to disseminate the knowledge in the domain of AI and Machine learning with python for Biomedical Applications. It empowers the participants to understand how AI can be used to innovate and improve the Medical 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. 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 in order to have an in-depth insight into the domain of AI & ML and expose them to Feasibility & future scope

Major Course Contents:

- Introduction to Artificial Intelligence, Machine Learning, Data Science
- Research in Machine Learning and Applications
- Machine Learning with Feature Representation
- Feature Selection and Ensemble Methods
- Machine Learning Basics – Linear Regression, Perceptron's, Multilayer Perceptron's, Stochastic Gradient Descent, Backpropagation
- Basics of Python
- Decision tree, Naive Bayesian Classification
- KNN, Unsupervised Learning Methods, K-Means
- Dimensionality Reduction Methods, PCA
- Support Vector Machine
- Introduction to Deep Learning and CNN models
- RNN
- Bio Medical Applications: Neural Networks protein structure prediction, Profile hidden Markov model sequence analysis, Analysis of Microarray, learning rules for biological data, Deep Learning in Mining Biological Data, Prediction of protein structure using ML, Medical Image data classification and segmentation

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/vrhfG4VMr3DRRwFc6>

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)	27.10.2021
Selection List by E- mail	28.10.2021
Duration	29.10.2021 to 9.11.2021

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.



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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

(If yes, please specify and attach a copy of caste certificate to claim the concession)

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 “AI and Machine Learning for Biomedical Applications”, sponsored by **Electronics & ICT Academy** during **18th October – 27th October, 2021** at Biotechnology Department, NIT Warangal.

Signature of Head of Institution
(with seal)

Address for correspondence

Post your application form

Dr. P. Shyam

Department of Biotechnology

NIT Warangal, Warangal

Telangana, INDIA-506004

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:

Dr. P. Shyam

Mobile: 9948561761

Email: shyamperugu@nitw.ac.in

Coordinators

Dr. P. Shyam

Department of Biotechnology

NATIONAL INSTITUTE OF TECHNOLOGY

WARANGAL – 506 004 (Telangana State)

Email: shyamperugu@nitw.ac.in Ph. No: 9948561761

Dr. M. Srinivas

Ph.D. (IITH), Post-Doc (Academia Sinica, Taiwan and ETS, Canada)

Computer Science and Engineering

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