



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON

Machine learning for Data science

using Python

(1st– 10th September, 2021)

Organised by

E & ICT Academy, NIT Warangal

in association with

Department of Electronics and Communication Engineering,

SASI INSTITUTE OF TECHNOLOGY & ENGINEERING (autonomous),

Tadepalligudem-534101, 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 Faculty Development Programme will help to disseminate the knowledge in the domain of data science and Machine learning. It empowers the participants to understand how data science can be used to innovate and improve the business process. 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 Data Sciences and expose them to feasibility & future scope.

Major Course Contents:

- Introduction : What is Data Science, Real-life examples and Applications.
- Python Essentials.
- Probability and Statistics for Data Science.
- Regression:
 - Univariate linear regression, Multivariate linear regression, Polynomial Regression, Applications.
- Classification:
 - Logistic regression, SVM, Multi-class SVM, Decision trees, K-NN, Applications.
- Ensemble Approaches:
 - Bagging, Random Forests, Boosting: Adaboost, Gradient boosting, Applications.
- Optimization: Gradient descent, Stochastic gradient descent, Batch gradient descent.
- Different clustering approaches and applications.
- Deep learning:
 - CNN,RNN,ANN, Reinforcement learning.
- Feature Engineering:
 - Feature Scaling, Feature Selection: Filter methods, Wrapper methods, Embedded methods.
- Dimensionality Reduction:
 - PCA, LDA, MDA, ICA,
- Recommendation Systems:
 - Introduction, Types of recommender systems, Content-based, Collaborative filtering: Matrix factorization based approaches, Knowledge-based, and Hybrid techniques, Times series forecasting, multi-criteria decision making, other real time examples.
- Hands-on to the majority of the topics using Python.

Resource Persons:

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/CE9Dw1zAstbGLSBDA>

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)	29.08.2021
Selection List by E- mail	30.08.2021
Duration	1.09.2021 to 10.09.2021

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.

About Sasi Institute of Technology & Engineering:

Sasi Institute of Technology & Engineering (SITE) under the aegis of Sasi Educational Society is started in the year 2002. Sasi Educational Society is imparting quality education for over 38 years. The campus is located in the business hub of west Godavari district, Tadepalligudem town, AP, amid lush green fields in the spacious area of 28 acres that offer world-class facilities. SITE is an autonomous institution which provides state of art facilities infrastructure, and competent faculty to its learning community. The college is affiliated to JNTUK, Kakinada and approved by AICTE, New Delhi. The institute has bagged NAAC 'A' grade and accredited by NBA. SITE is providing best education in engineering and technology over two decades. It is treated as the best institute in coastal belt of Andhra Pradesh for professional education. SITE stands with highest success rate in academics and placements.

About ECE Department

The department of Electronics and Communication Engineering was inaugurated in the year 2002, with in-take of 60 seats and in the year 2007 the no of seats extended to 180. Also introduce M.Tech courses in VLSI & Embedded Systems, in the year 2008 and Communication Engg & Signal Processing included in the department with 18 seats. The Electronics and communication engineering programme is recognized by All India Council for Technical Education (AICTE)-New Delhi, a statutory body of Government of India and approved by Jawaharlal Nehru Technical University, Kakinada.

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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 “Machine Learning for Data Science using Python”, sponsored by Electronics & ICT Academy during 1st – 10th September, 2021 at Sasi Institute of Technology and Engineering, (Autonomous), Tadepalligudem.

Signature of Head of Institution
(with seal)

Address for correspondence:

Post your application form to

Dr. T J V Subrahmanyeswara Rao,
Professor & HOD of ECE,
Sasi Institute of Technology & Engineering,
Tadepalligudem- 534101, Andhra Pradesh.

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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Coordinators

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