# ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) Data Science - Foundations and Research Issues



(Oct 19<sup>th</sup> to 23<sup>rd</sup> and Oct 25<sup>th</sup> to 29<sup>th</sup>)

Organised by

Electronics & ICT Academy, NIT Warangal

in association with

Jawaharlal Nehru Technological University Anantapur

(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. Data Science 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 to Data Science
- Recommendation Systems
- Introduction to R Language and Statistical Analysis using R
- Introduction to Python
- Data Acquisition and Data Science Life Cycle, Data Visualization
- Introduction to Machine Learning
- Unsupervised Learning Methods, K-Means
- Supervised Learning Methods
- Linear Regression: Simple and multiple linear regressions
- Optimization methods
- Feature Selection Methods
- Dimensionality Reduction Methods (PCA)
- Hands on sessions on Unsupervised and Supervised Methods
- Supervised Learning Methods on Real Time Applications
- Support Vector Machines and Neural Networks
- Meta Heuristic Approaches
- Ensemble Methods and Matrix Vectorization
- Real Time Applications

### 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:**

For the Faculty of the JNTUA Constituent and Affiliated Colleges, the Registration fee will be paid by the University after completion of the Registration process.

### How to apply:

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

https://forms.gle/qUduvh9fiX8DyxRDA

### Selection Criteria:

There will be a selection criteria that will be followed by the University. Minimum of 50 participants are required and maximum permitted participants is 80.

The list of selected participants will be intimated through email. If selected, it is mandatory for the participant to attend the program without fail

Candidates will be issued satisfactory certificates on successful completion of the course. Reservations may be followed for selecting candidates as per GOI norms.

#### **Important Dates:**

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Last date (Application)	04.10.2021
Selection List by E- mail	11.10.2021
	19.10.2021 to 23.10.2021
Duration	And
	25.10.2021 to 29.10.2021

### **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 JNTUA:

The College of Engineering, Anantapur was started at Guindy, Madras in 1946, The College was initially affiliated to Madras University during 1946-1955 and to Sri Venkateswara University, Tirupathi during 1955-1972. In 1972 by an Act of State Legislation, JNT University was established at Hyderabad and the College of Engineering, Anantapur went into the fold of JNTU. Later, in the year 2008, by an Act of State Legislature, JNTU was trifurcated into three independent universities viz., JNTU Hyderabad, JNTU Kakinada, and JNTU Anantapur.It has four constituent units, JNTUA College of Engineering, Anantapur, JNTUA College of Engineering, Pulivendula, JNTUA College of Engineering, Kalikiri and Oil Technology and Pharmaceutical Research Institute. In addition to the Constituent units, JNTUA has 98 Engineering Colleges, 33 pharmacy Colleges, and 29 stand-alone MBA/MCA colleges affiliated to it. Since, its inception, JNTUA is committed to develop and nurture technological education and intends to produce technical manpower of high quality, comparable to the best in the World.

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## **Registration Form**

- 1. Name :
- 2. Designation :
- 3. Institution
- 4. Type of the Institution: Autonomous/Non-Autonomous
- 5. Email
- 6. Mobile No :
- 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

# **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

## SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. .... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on **"Data Science -**Foundations and Research Issues", sponsored by Electronics & ICT Academy during Oct 19<sup>th</sup> to 23<sup>rd</sup> and Oct 25<sup>th</sup> to 29<sup>th</sup> at JNTUA, Anantapur.

Signature of Head of Institution (with seal)

#### **Address for correspondence** Post your application form

### Prof. P. Chenna Reddy

Department of CSE JNTUA College of Engineering, Anantapur, Andhra Pradesh, INDIA-515002.

It is requested to all the delegates, after completion of application form, the screenshot of the 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: <u>https://nitw.ac.in/eict</u>

### For more enquiries please contact:

Prof. P Chenna Reddy Mobile: 919441034797 Email:<u>chennareddy.cse@jntua.ac.in</u>

### Prof. P. Chenna Reddy

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