

ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON Predictive Analytics and Business Intelligence

(1st – 10th December 2021)

organised by

Electronics & ICT Academy, National Institute of Technology, Warangal.

in association with

G. Narayanamma Institute of Technology and Science (Autonomous), Hyderabad
(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 FDP is to give an introduction and insight into one of the most important data analytical technique, "Predictive Analytics". Predictive Analytics is the use of data, statistical algorithms and machine learning techniques to identify the likelihood of future outcomes based on historical data. BI is a broad term that encompasses data mining, process analysis, performance benchmarking, and descriptive analytics. It also helps in managing the business information which ultimately results in attaining the business objectives for its continuous success in the business industry. The program offers both theoretical knowledge and hands-on sessions in the area of Predictive Analytics and Business Intelligence to lead business transformation by leveraging emerging technologies through real-world case studies and exercises.

Major Course Contents:

1. Introduction to Data Analytics, State-of-Art in Data Analytics.
2. Approaches to Predictive Analytics.
3. Predictive Modelling - Transformation and preparation of data, Evaluation of Predictive modelling.
4. Data Reduction and Analysis Techniques
5. Regression for Predictive Analytics- Linear, Logistic Regression, LDA, Time Series Forecasting
6. ARMA, ARIMA models
7. Machine learning in Predictive Modelling
8. Python scripting
9. Predictive Analytics Use Case
10. Text mining and social media analysis
11. Data Visualisation and storytelling using Tableau or PBI
12. Business Intelligence best practices and case studies
13. BI project management, BI team and staffing
14. Business Intelligence strategy, Operational BI, BI Selection
15. Self-service and Collaborative BI

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/q1qtJ2au1ZhwZarp7>

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)	26.11.2021
Selection List by E- mail	27.11.2021
Duration	01.12.2021 to 10.12.2021

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 GNITS:

G. Narayanamma Institute of Technology & Science (GNITS), Hyderabad, a leading Engineering college for women, was founded by late Mr G. Pulia Reddy in 1997, with an objective to provide quality education in Engineering. GNITS received UGC Autonomous status for 10 years from 2018 and is affiliated to Jawaharlal Nehru Technological University (JNTU-H), Hyderabad with accreditation from NAAC, NBA and ISO certified. GNITS offers 8 B.Tech and 5 M.Tech programmes with 2640 students enrolled in B.Tech stream and 180 in M.Tech stream. First college in India to establish Apple Lab inaugurated by Tim Cook. Its excellent infrastructure provides opportunity for students to excel and secure placements in top MNC's on par with NITs, IITs & IIITs.

About CSE:

The Department of CSE offers two new programmes under B.Tech CSE with specialization in AI & ML and Data Science. The department has 9 doctorates & 24 pursuing Ph.D from reputed universities. Two research centres are established one for IOT and another for AI & ML with AICTE-MODROB funds. Quality research papers & 5 patents are published by various faculty. 95% of eligible students from CSE are placed in top MNC's with the highest pay package of 45 lakhs.

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Shaikpet, Hyderabad - 500 104

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(AUTONOMOUS)
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LINE FACULTY DEVELOPMENT PROGRAM (FDP)

ON

Predictive Analytics and Business Intelligence
(1st December - 10th December 2021)

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Organized by

Department of Computer Science and Engineering
G. Narayanamma Institute of Technology and Science, Hyderabad
in association with **Electronics & ICT Academy**, National Institute of Technology, Warangal

Day & Date	10.30 am - 12.30 pm	1.30 pm - 3.30 pm
Day 1 01/12/21	Inaugural Function. Business Analytics & Map Reducing <i>Dr. RBV Subramanyam, Professor, CSE, NIT Warangal</i>	Business Analytics & Map Reducing <i>Dr. RBV Subramanyam, Professor, CSE, NIT Warangal</i>
Day 2 02/12/21	Python scripting <i>Mr. Nagesh Bhatta Sristy, NIT AP</i>	Hands-on session <i>Mr. Nagesh Bhatta Sristy, NIT AP</i>
Day 3 03/12/21	Machine learning in Predictive Modeling <i>Dr. N. Kalyani, Professor, CSE, GNITS</i>	Data Reduction and Analysis Techniques, Regression for Predictive Analytics* Linear, Logistic Regression, LDA <i>Dr. Venkateswara Rao Kagita, CSE, NITW</i>
Day 4 04/12/21	Time Series Forecasting ARMA, ARIMA models <i>Dr. Srinivas Padmanabhuni, Eminent Engineer, AI Thought Leader, Entrepreneur</i>	Hands-on session <i>Dr. Srinivas Padmanabhuni, Eminent Engineer, AI Thought Leader, Entrepreneur</i>
Day 5 05/12/21	Text mining and social media analysis <i>Dr. P. Radhakrishna, Professor, CSE, NIT, Warangal</i>	Case Studies on social media analysis <i>Dr. P. Radhakrishna, Professor, CSE, NIT, Warangal</i>
Day 6 06/12/21	Data Visualization and storytelling using Tableau or Power BI <i>Mr. P. Mohan, Senior Data Scientist, Tech Mahindra</i>	Data Visualization and storytelling using Tableau or Power BI <i>Mr. P. Mohan, Senior Data Scientist, Tech Mahindra</i>
Day 7 07/12/21	Data Visualization and storytelling using Tableau or Power BI <i>Mr. P. Mohan, Senior Data Scientist, Tech Mahindra</i>	Data Visualization and storytelling using Tableau or Power BI <i>Mr. P. Mohan, Senior Data Scientist, Tech Mahindra</i>
Day 8 08/12/21	BI selection, Self-service and Collaborative BI <i>Ms. Manasa Devi, Data Scientist, Ascent Fund Services</i>	Business Intelligence best practices and case studies <i>Mr. Umamaheswara Sarma, NIT Warangal</i>
Day 9 09/12/21	BI project management, BI team and staffing <i>Dr. Srikanth, Group Manager E&R, Infosys Ltd, Mysore</i>	3:30 - 5:30 Software Analytics <i>Dr. Anojanyulu Pasala, AI/ML, Innovation and technology leader</i>
Day 10 10/12/21	Hands-on Session (Use Case) <i>Mr. Suresh Kadari, Cedara Tech Pvt. Ltd</i>	1:30 - 3:30 Business Intelligence strategy, Operational BI <i>Dr. Srikanth, Group Manager E&R, Infosys Ltd, Mysore</i>
	Exam (11.30 am - 12:00pm) Valedictory Function (12.15 pm)	

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ELECTRONICS & ICT ACADEMY
NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL, (T.S.), INDIA
and



G. Narayanamma Institute of Technology and Science, (Autonomous) (for Women), Shaikpet, Hyderabad

Participation Certificate

This is to certify that **Gundrala Madhavi**, Assistant Professor
 from **G Narayanamma Institute of Technology and Science**
 has participated in a 40-hour Online Faculty Development Programme on "**PREDICTIVE ANALYTICS AND BUSINESS INTELLIGENCE**" Sponsored by Ministry of Electronics and Information Technology (MeitY) GoI, organised by E&ICT Academy, NIT Warangal and G. Narayanamma Institute of Technology and Science (Autonomous) (for Women), Shaikpet, Hyderabad during 1st - 10th December, 2021.

She / He has successfully completed all the requirements for the completion of the programme.

Handwritten signature
 Dr. A. Sharada
 Coordinator
 GNITS, Hyderabad

Handwritten signature
 Dr. K. Ramesh Reddy
 Principal
 GNITS, Hyderabad

Handwritten signature
 Dr. S. Ravi Chandra
 Coordinator
 NIT, Warangal

Handwritten signature
 Prof. R.B.V. Subramaanyam
 Chief Investigator
 E&ICT Academy, NIT Warangal

Handwritten signature
 Prof. N.V. Ramana Rao
 Director
 NIT, Warangal



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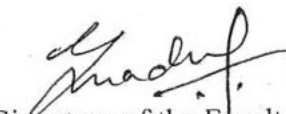
Department: Electronics and Communication Engineering
2021-22
REPORT


FDP on “Deep learning and Machine learning in Biomedical signal processing”
Date of program: 23-08-2021-3-9-2021

Resource person: Dr.Ravi Kumar, Santosh Kumar
About the Program:

The FDP was inaugurated on 23rd Aug 2021 followed by first session by Dr.Ravi Kumar, Assoc.Prof, ECE Dept, NITW.
On the second day of the FDP, FN session was by Dr.Ravi Kumar, Assoc.Prof, ECE Dept, NITW on Introduction to linear regression followed by a hands on session in the afternoon.
Third day was a complete hands on session on regression models.
Fourth day of the FDP FN session was Preprocessing of EEG data by Santosh Kumar, Assoc.Prof, BVRIT.
Fifth was a session by Dr.RaviKumar on logistic regression followed by hands on session.
6th day was a session on Introduction to neural networks by Dr.Ravi Kumar followed by application of neural network in cardiac disease detection by B.Ahadit
7th and 8th days had sessions on recurrent neural networks followed by valedictory.

The overall experience of attending the workshop is quite helpful in a better understanding on Neural network, concept on machine learning and how to can be applied to Biomedical signal Processing.


Signature of the Faculty member


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