

Centre for Continuing Education of NIT Warangal:

The Centre for Continuing Education of NIT Warangal organizes Continuing Education Programs and Workshops in the frontier areas of Science, Engineering, Technology, Management, Humanities, Social Science and socially relevant themes on self-financing basis in three different modes: (i) At NIT Warangal by NIT Warangal (ii) At NIT Warangal in collaboration with other Organizations (iii) By NIT Warangal Faculty at the Host Organization/Institute.

About NIT Warangal:

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 13 Departments offering eight undergraduate and 32 post-graduate programs besides doctoral program. About 5000 students across the country and about 500 international students study in the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure, state of the art library, seminar halls, guest houses and laboratories.



About: Maturi Venkata Subba Rao (MVSR) Engineering College (A)

The Department of Mechanical Engineering was established in the year 1981 at the time of the inception of Maturi Venkata Subba Rao (MVSR) Engineering College. The Department offers one Under Graduate programme, B.E in Mechanical Engineering, with an intake of 60 and one Post Graduate programme in M.E with specialization in CAD/CAM with an intake of 18 seats. The Department has well-equipped laboratories with research facilities and is actively involved in many fabrication and research projects in collaboration with leading R&D organizations.

The Department of Electrical and Electronics Engineering was established in the year 1997. The Department offers one Under Graduate programme, B.E in Electrical and Electronics Engineering, with an intake of 60. There are 10 well equipped laboratories and facilities which are being used for training of undergraduate students. The Department has started various student professional societies like IEI, ISTE, IEEE-PES Student chapters and Energy Savers' Club to enhance and extend their knowledge & make themselves in par with present developing world. The placement record of the Department has always been impressive.

For any query regarding this program, please contact the Coordinators.

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Center for Continuing Education



Online Continuing Education Program on “Artificial Intelligence and Machine Learning Applications in Engineering”

20th February to

26th Feb, 2023

Call for Registration and Participation

Coordinators

Dr.G.Venkatesh, MED NITW

Dr. B. Suresh Kumar Reddy, MED MVSREC

Dr.D.Harikrishna,EEE,MVSREC

Organized by

Department of MED, NIT Warangal & Dept. of MED&EEE, MVSREC Hyderabad

In association with the

Center for Continuing Education, NIT Warangal



Overview of the FDP:

Machine learning in medicine has recently made headlines. Machine learning to help identify cancerous tumors on mammograms. Stanford is using a deep-learning algorithm to identify skin cancer. Still, machine learning lends itself to some processes better than others. The value of machine learning in disease diagnosis is its ability to process huge datasets beyond the scope of human capability, and then reliably convert analysis of that data into clinical insights that aid physicians in planning and providing care, ultimately leading to better outcomes, lower costs of care, and increased patients satisfaction. This FDP is aimed to bring out various machine learning models for disease diagnosis.

Objectives:

- The objective of the FDP is to introduce fundamentals of Machine Learning for social relevance applications.
- The program would help the participants to understand the key concepts behind Internet of Things and machine learning models.
- To give comprehensive knowledge of various classification models, Clustering and ensemble.
- To learn hyper-parameter and its fine tuning.
- This FDP also focuses on exploring various research opportunities in application of AI and ML in mechanical and electrical engineering applications.

Topics to be covered:

- Introduction to Machine Learning, Foundational Concepts
- Supervised Learning: Artificial Neural Networks, Statistical Classification Models, Case studies.
- Unsupervised Learning: Clustering, Cluster Validity Indices, Case Studies,
- Fuzzy, ANN and AI ML in Mechanical engineering applications.
- Anomaly Detection for Medical Data: LOF, Normal Distribution, etc.
- Improving Machine Learning Models: Hyper-parameter tuning, Regularization and Optimization. Techniques and electrical engineering applications
- Hands-on Tour to Machine Learning models, Public Datasets

Resource Persons:

Eminent faculty from IITs, NITs, IIITs, Central Universities, Industry and Senior Faculty from different departments of NIT Warangal, will deliver lectures and conduct hands on sessions.

Registration is open to: Faculty members in all disciplines of Engineering, Sciences, Mathematics, Life sciences, Management, Post-Doctoral Fellows, Research Scholars, PG students, UG students who have an aptitude to work in the areas of Internet of Things and Machine Learning. by filling the following google-form with payment proof

How to Apply: Eligible candidates may apply by filling the following google-form with payment proof on or before **15th Feb, 2023**.

<https://forms.gle/UPfZRkQkr9saSJ8W9>

Registration fee:

Category	Amount
Faculty, Post-doctoral fellows , Research Scholars, PG students, UG students	Rs. 500 /-
Industry participants	Rs. 1000/-

Registration fee may be remitted Online through NEFT to the Bank account given below. Proof of remittance of the requisite registration fee (with transaction number if online transaction) shall be uploaded in the google form.

Account Number	62403680215 (Savings Account)
Account Name	Center for Continuing Education NITW
Bank Name:	State Bank of India (SBI)
Branch:	NIT Warangal
IFSC Code:	SBIN0020149

Confirmation of Participation:

On receipt of the google form and fee remittance receipt, participants will be sent confirmation of their participation through email by **15th Feb, 2023**. As the program is conducted online, the number of participants in the workshop is limited to 100. Registrations are accepted on first come first serve.