



In Association with **NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL** Center for Continuing Education



28th March 2022 - 01st April 2022

National Online Short-Term Course on

# Artificial Intelligence and Machine Learning Applications

Organized by

Department of Artificial Intelligence and Data Science & Department of Artificial Intelligence and Machine Learning

#### **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. It is ranked among India's top technical education institutions. 13 Departments are offering eight undergraduate and 32 post-graduate programs besides doctoral programs. About 5000 students across the country and about 500 international students study on the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure, state of an art library, seminar halls, guest house and laboratory.

# **About Center for Continuing Education**

The Center for Continuing Education NIT Warangal organizes FDPs/Training programs/ Seminars/ Workshops etc., in the frontier areas of Science, Engineering, Technology, Management, Humanities, Social Science, and Socially relevant themes on a self-financing basis in three different modes: (i) At NIT Warangal (ii) At NIT Warangal in collaboration with other organizations/ Engineering Colleges / Institutes iii) By NIT Warangal Faculty at the Host Organization/Institute.

# About Saveetha Engineering College(Autonomous)

Saveetha Engineering College (SEC) was established in 2001 by the Founder, Chairman Dr N. M. Veeraiyan, a committed and dedicated Medical Professional. SEC has a total strength of 4349 students in 13 UG courses, 8 PG Courses, including MBA and Doctoral programs (PhD) in five Departments. National Board of Accreditation NBA has Accredited 5 UG courses. SEC is ranked 96 by National Institute Ranking Framework (NIRF) for the academic year 2017-18 among all IITs, Central, State and Private Institutions in India. Saveetha Engineering College is awarded 'A' GRADE with a high score of 3.19 on a scale of 4 by the National Assessment and Accreditation Council (NAAC) for 5 Years.SEC is awarded AUTONOMOUS status by the UGC from 2019-2020. SEC is recognized as a Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research (DSIR), Government of India; Five Research Centres recognized by Anna University; and signed about 180 MoU's with Reputed Academic Institutions in India and Abroad.

#### **About the Department**

With Activity Based Learning as the driving motto, the Department of Artificial Intelligence and Data Science (AI & DS) was established in 2020 with an intake of 60 students. Currently, 120 students are admitted in the year 2021. Furthermore, B.Tech., Artificial Intelligence and Machine Learning (AI & ML) was initiated in 2021 with 60 students' intake. Both are four-year full-time undergraduate programmes recognized by the All India Council for Technical Education (AICTE). The departments have a team of dedicated and experienced faculty members to train the students through world-class infrastructure, comprehensive hands-on experience and researching the field of AI, DS, and ML. Research laboratories in the department includeAugmented Reality / Virtual Reality Lab, Machine Learning Lab, Industrial Robotics Lab, Mobile Robotics Lab and 3D Printing Lab.

#### **Course Objectives**

Upon completion of the training programme, the participants can understand

- To impart the knowledge of Deep Learning with IoT, and its tools and techniques.
- To explore the research Opportunities of Deep Learning with IoT.
- Be able to design and implement variousDeep Learning algorithms with IoT.
- Upon the completion of the training programme the participants/trainee can understand/ gain knowledge insolving the real world problems in AI Machine learning anddeep learning applications.
- Latest tools and techniques in AI Machine learning anddeep learning.
- Research oriented problem solving in AI machine learning and deep learning.

#### **Course Content**

Programme aims in understanding the following

- Basics of AI, ML and DL, Supervised and unsupervisedAlgorithms.
- Working with data preprocessing and data visualization Using python.
- Supervised learning like regression, Unsupervised Machine Learning algorithms like SVM, KNN etc.
- Deep learning techniques like single and multi-layer Perceptron, LSTM.
- Introduction to AI, machine learning tools and techniques, Simple and multiple linear regression.
- Neural networks and multilayer perceptron, Back Propagation CNN applications.
- Heuristic and meta-heuristic techniques in Al.
- Advanced research applications in Machine and deep Learning

#### **Expected Outcomes**

At the end of CCE, Participants will be able to

- Gain a good understanding of fundamental concepts,Real time challenges and recent advancements of Artificial Intelligence and Machine Learning.
- Faculty & Research Scholars can identify research problems that might help in implementing real worldapplications.

#### **Resource Person**

#### The Sessions will be handled by the experts From IITs/NITs/Central University.

# Who should attend ?

The Programme is open to all Faculty/Research Scholars/ Industry Professionals/PG Degree/Polytechnic and other eligible students can register the course.

### **How to Apply**

Registration Fee: Rs. 500 | 5 Days | Time Slot: 04.30 - 07.30 PM

Interested candidates can apply online by clicking below link/QR CODE

# LINK: https://forms.gle/Xn58NBA5gqfPa9qt5

Last Day for Registration: 27th March 2022



# **Bank Account Details**

Account Name: CCE NITW, BANK NAME: SBI, ACCOUNT NO: 62403680215, IFSC CODE: SBIN0020149, BRANCH: NIT WARANGAL.

The interested individuals may register on the first come first serve basis. Since, this is open for all Indian participants; the seats are limited only. Participants will get E-certificate upon completion of the course.(Confirmation mails will be sent to the selected participants before two days of the commencement of the FDP.

Once registration is done your selection/participation is confirmed.

# Coordinators

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