NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

Center for Continuing Education & Department of Computer Science & Engg

ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON

Python Programming for Beginners using Artificial Intelligence and Machine Learning

25th October 2021 - 3rd November 2021

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 programmes besides doctoral programmes. 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 house and laboratory.

About Center for Continuing Education

The Center for Continuing Education NIT Warangal organizes FDPs/Training programmes/Seminars/Workshops etc., 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 (ii)At NIT Warangal in collaboration with other organizations/ Engineering Colleges / Institutes iii) By NIT Warangal Faculty at the Host Organization/Institute.

About Department of Computer Science & Engg

The Department of Computer Science and Engineering (CSE) offers B.Tech course in CSE, M.Tech courses in CSE, Information Security (IS) and Master of Computer Applications (MCA). The Department has experienced faculty with good publications and well-established laboratories. The Department has liaison with reputed industries and R&D organizations like Microsoft, IBM, Oracle, Accenture, Infosys, TCS, EMC2, C-DAC, Motorola, NIC, Sun Micro Systems, SPSS and tie up with IISc in certain areas. Department conducts various sponsored programmes like GIAN, International and national conferences throughout the year.

Course Content

- Introduction to Machine Learning and Tools Installation.
- Numpy and Pandas using Python,Data Preprocessing and Visualization.Simple and Multiple Linear Regression Introduction to Python: why Python Programming, Data Types and Operators, Control Flow, Functions, Scripting, Classes, Regression through gradient descent, Particle swarm optimization, Teaching Learning based Optimization.
- Optimization through meta heuristic techniques,
- Linear and Non-Linear regression with the help of Gradient Descent Technique, Multi language Machine Translation

using NLP Techniques.
- Decision Tree and Support vector Regression.
- Introduction to Deep Learning.
- ANN using Python.
- Real Time object Detection using Open CV and DNN.
- Tensor Flow and and Keras using Python.
- Face Mask Recognition system using Tensor Flow and Keras, Deep RNN and Bidirectional LSTM.

Softwares: Jupiter Notebooks, Anaconda, Tensorflow,CUDA.

Packages: Pandas, Numpy, and Matplotlib.

Project: CNN and it's applications in Medical Image Processing, in natural language processing, Text classification using Google Bert Model.

Course Objectieves:-

- Upon the completion of the training programme the participants/trainee can understand/Gain knowledge in solving the real world problems in AI, Machine learning and Deep learning applications .
- Latest tools and techniques in AI Machine learning and deep learning.

Resource Persons:-

The Sessions will be handled by the experts From **IITs/NITs/ Industries and Professor from U. S. Universities.**

How to Apply

Interested candidates can apply online by clicking below link

https://forms.gle/rcwEtThA7R8LzvBg6

Participiants details need to be filled and payment details uploaded by using above link in Google Forms on or before 24th October, 2021.

Registration Deadline: 24th October 2021.

Who should Attend?

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

Timings: Morning: 9.00.AM to 12.00.PM.

Registration Fees:

Faculty: 1000 (Thousand only).

Industry Professionals: 2000 (Two Thousand only).

For Foreigner:- 50 USD Dollars.

Bank Account Details

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

Confirmation mails will be sent two days before the Programme .Once registered Participiation is Confirmed.

The interested individuals may register on the first come first serve basis. Since, this FDP is open for all Indian participants; the seats are limited to 250 only.

E-Certificate: Participants will get **E-certificate** upon completion of the course.

Address for Correspondence

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Any Further queries, please contact the Coordinator.