



**Five Days
Short Term Course on**

APPLICATION OF MACHINE LEARNING AND DEEP LEARNING IN ENGINEERING PROBLEMS

Under TEQIP - III

26th – 30th October, 2020

Organized by:

**Department of Computer Science &
Engineering**

National Institute of Technology,
Srinagar – 190006, J&K

ABOUT NIT SRINAGAR

National Institute of Technology, Srinagar, formerly Regional Engineering College, Srinagar, is a government engineering and research institution located in Srinagar, Jammu & Kashmir, India. It is one among the 31 National Institutes of Technology (NITs) and as such is directly under the control of Ministry of Human Resource Development (MHRD), Govt. of India. It was established in 1960 as one of several Regional Engineering colleges established as part of the Second Five Year Plan (1956-1961) by the Govt. of India. It is governed by the National Institutes of Technology Act, 2007, which has declared it as an Institute of National Importance.

NIT campus is on the bank of world-famous Dal Lake. The University of Kashmir and Hazratbal Shrine are at walkable distance. NIT Srinagar campus comprises of academic building, student hostels with 100% residential facilities for faculty, staff and students.

ABOUT DEPARTMENT OF CSE

The department of Computer Science and Engineering commenced its Bachelor of Technology (B.Tech) degree program in 2007. The Ph.D. Program has also been offered since 2010 in various disciplines of Computer Science and Engineering. The department aims at providing organizations with engineers who are a best fit for the industrial needs. The department always strives to build such skills among the students in a systematic manner. Research in the department is at the leading-edge of technological innovation and encompasses all major areas of Computer Science and Engineering. The department has unique research facilities that enable leading-edge research in many areas such as Sensor and Wireless Networks Network Security, Internet of Things, Machine Learning, Computational Biology and Computer Architecture. These facilities provide an excellent opportunity for graduate students and research scholars to be trained and gain valuable experience. The Department is consolidating its effort to promote industrial research and consultancy in relevant areas.



ABOUT THE COURSE

- The STC aims to provide a mathematical understanding of various Machine learning classification, detection, tracking and optimization methods.
- To make participants familiar with commonly used tools and models for Machine learning classification, detection, tracking and optimization.
- An overview of the experimental flow visualization and implementation techniques for IoT and different engineering problems.
- To acquaint the participants with the use of basic qualitative and quantitative research techniques and data analysis tools.



EXPECTED COURSE TOPICS

- Introduction to Machine Learning, Deep Learning.
- Soft computing, and Optimization Techniques.
- Basics of AI, Introduction to ANN, Linear Regression.
- Decision Trees, Support Vector Machines.
- Image Processing with OpenCV.
- Deep Learning Networks: Introduction to Tensor Flow.
- Convolutional Neural Networks and its Application to Classification, Detection and Tracking Problems.
- Machine Learning Model Optimization.
- Introduction to Optimization techniques.
- Novel meta-heuristic algorithms machine learning and advance computing.

REGISTRATION

- Last Date of Registration: **22 October, 2020.**
- No registration fee required.
- The STC will be conducted online.
- The link for joining will be emailed to only the registered participants.
- e-Certificate will be provided to participants.

Registration Link:

<https://forms.gle/JTre17NECKwee6ox8>



ORGANIZING COMMITTEE

CHIEF PATRON

Prof. (Dr.) Rakesh Sehgal
Director, NIT Srinagar

PATRONS

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HOD, Computer Science and Engineering

Prof. (Dr.) M. F. Wani
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& DEEP LEARNING IN ENGINEERING PROBLEMS**

26th OCTOBER – 30th OCTOBER, 2020

ORGANISED BY:

Department of Computer Science and Engineering
National Institute of Technology Srinagar, Hazratbal, 190006, India

EMINENT SPEAKERS



Prof. Bhabatosh Chanda
Professor,
Electronics & Communication Science Unit
Indian Statistical Institute, Kolkata



Prof. Hari Mohan Pandey
Associate Professor,
Department of CSE
Edge Hill University, U.K



Dr. Partha Pratim Roy
Associate Professor,
Department of CSE,
IIT Roorkee



Dr. Sudhakar Sahoo
Assistant Professor,
Department of CSE,
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Bhubaneswar



Dr. Jay Prakash
Assistant Professor,
Department of CSE,
NIT Calicut



Dr. Saiyed Umer
Assistant Professor,
Department of CSE,
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