

**Short Term Course (e-STC)
on
Machine Learning and its
applications in
Information Security, Computer
Vision and Natural Language
Processing (MaLICO N 2023)**

13th-17th March 2023

An Initiative of
National Institute of Technology Hamirpur
Hamirpur, Himachal Pradesh, India



Organized by
**Department of Computer Science &
Engineering**
National Institute of Technology, Hamirpur
(H.P.) 177005
<http://www.nith.ac.in/>

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REGISTRATION PROCESS

The interested participants should register by filling the Google form through the below link:

<https://forms.gle/3RjgTYG2mzW3LhCk8>

ELIGIBILITY

This program is open to faculty members, research scholars, PG & UG Students, and industrial personnel.

CERTIFICATION

E-certificates will be provided to those participants who have attended at least 75% of the program.

ABOUT THE INSTITUTION

The National Institute of Technology, Hamirpur is an Institute of National Importance. The Institute offers B.Tech, M.Tech and PhD programmes in various disciplines of Engineering, Humanities and Sciences.

The Institute is functioning in a vast area of above 250 acres at Anu in Hamirpur district of Himachal Pradesh and is 4 Kms from main bus stand of Hamirpur on Mandi-Jalandhar National Highway (NH-70). The city of Hamirpur is well connected with the rest of the country by road.

Nearest Railway Station: UNA (about 85 Km)

Nearest Airport: GAGGAL (Kangra) (about 85 Km)



ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering was established in the year 1989. The Department offers B.Tech. (CSE), M.Tech. (CSE, Mobile Computing), B.Tech. and M.Tech. Dual Degree (CSE) and Ph.D. degrees. The B.Tech. programme has been accredited by NBA. Our students graduate with more than 100% placement through campus and some of them are placed in more than one organization. The Department has well

experienced and dedicated faculty members with different specializations. We have well equipped laboratories with state-of-the-art facilities like servers/workstations, desktops and mobile devices.

CALL FOR PARTICIPATION

The National Institute of Technology (NIT), Hamirpur is organizing a Short Term Course (Online Mode) on Machine Learning and its applications in Information Security, Computer Vision and Natural Language Processing during 13th-17th March 2023. Distinguished academicians, practitioners, young faculty members, research scholars, and students are invited to participate in this STC. The short term course will provide an excellent opportunity for participants to become aware of the recent trends in the areas of Information Security, Computer Vision and Natural Language Processing and help them discover possible research directions.

OBJECTIVES OF THE SHORT TERM COURSE (e-STC)

Information Security includes prevention of unauthorized access, use, disclosure, disruption, modification, recording or destruction of electronic or physical information. Machine learning can help mitigate cyber threats and bolster security infrastructure through pattern detection, real-time crime mapping and thorough penetration testing. Machine Learning also enables researchers to attempt to fulfil the elusive goal of Computer Vision. Computer Vision has huge applications in varied domains, from autonomous driving cars to elderly healthcare. Analyzing text data is a part of Natural Language Processing (NLP). NLP is a field in Artificial Intelligence enabling computers to understand natural (human) language. In the fields of Information Security, Computer Vision and NLP,

deep learning techniques have taken a dominant position over traditional methods. Researchers have been reporting much higher performance metrics by applying deep learning to solve important problems in these domains.

This short term course, Machine Learning and its applications in Information Security, Computer Vision and Natural Language Processing, will provide essential knowledge and skills required to perform machine learning based research in information security, computer vision & natural language processing for important problems encountered in industry. A combination of lectures, case studies, and workshops will be used to cover following representative topics of interest:

- Cloud computing and Deep learning
- Security issues in cloud computing
- Network security and Mobile security
- Security threats & prevention strategies
- Computer Vision and its applications
- NLP based Network security framework
- Neural machine translation
- NLP for low-resource languages
- Text Summarization using deep learning
- Applications of machine learning in speech

RESOURCE PERSONS

Faculty from IITs, NITs, other premier institutions/organizations will deliver the lectures.

REGISTRATION FEE

- a. Rs. 500 for participants from Academia/R&D Labs
- b. Rs. 200 for students
- c. Rs. 1000 for participants from Industry

Last date of Registration: 1st March, 2023.

10th March, 2023