One Week Online International Faculty Development Programme on

Machine Learning and Computer Vision:

Applications, Research Challenges
24th to 28th August 2020

(Sponsored by TEQIP-III)



Jointly organized as twining programme by
Department of Computer Science and
Engineering
National Institute of Technology
Silchar, Assam

and

Gauhati University Institute of Science & Technology, Guwahati, Assam





About the Institute

National Institute of Technology. Silchar is one of the 31 National Institutes of Technology of India and was established in 1967 as a Regional Engineering College in Assam. In 2002, it was upgraded to the status of National Institute of Technology and was declared as Institute of National Importance under the National Institutes of Technology Act, 2007. NIT Silchar is a fully residential campus situated on the banks of river Barak and on a sprawling campus spread over 625 acres of land surrounded by scenic tea gardens on the outskirts of Silchar, NIT Silchar has secured 46th rank in Engineering and 94th rank under Overall Category in NIRF 2020.

About the Department

The undergraduate program in Computer Science and Engineering started with the admission of its first batch of B.E. students in the year 1987. The department offers B. Tech., M. Tech. and Ph. D. programmes. With sound Vision and Mission, this department provides a platform for nurturing Engineers and researchers to lead the country in particular and the entire World in general. The department is well-equipped with ultra-modern facilities for research.

The faculty members are specialized in diverse fields and there commendable research ambience in the Department. Department of Computer Science and Engineering takes up R & D projects sponsored by funding agencies. various Department of Computer Science & Engineering (CSE) is continuously producing "Engines & Engineers" to serve the entire world since its inception. We transform AIEEE/JEE qualified student to Engine and Engineer.

COMMITTEE

Patron

Prof. Sivaji Bandyopadhyay Director, NIT Silchar

Chairman

Dr. Samir Kumar Borgohain HOD, CSE, NIT Silchar

Convener

Dr. Sukumar Pati

TEQIP-III Coordinator, NIT Silchar

Coordinators

Dr. Malaya Dutta Borah, NIT Silchar Dr. Naresh Babu Muppalaneni, NIT Silchar

Co-coordinator

Dr. Parismita Sarma, GUIST, Guwahati



About the FDP

The main objective of the FDP is to explore Machine Learning (ML) and Computer Vision(CV) techniques and how Analytically evaluates the ML applications in computer vision and predicts future prospects.

ML and CV are two of the most required after branches of Computer Science that can power very sophisticated systems but when you combine the two, you can achieve even more. We can consider ML as an ability that allows computers to learn from data and do something based on the knowledge they have. The most important thing about ML is that it allows computer programs to teach themselves and to grow and change when exposed to new information.

CV can be called as a method that allows computers to understand images and what's in those images. Computer Vision tries to do what our brain does with the data from our eyes. Computer vision is a part of AI that helps computers analyze the content of images and video and distinguish different objects in the physical world in order to better understand what's going on around them.

Resource Persons

- **Dr. Ting Choo Yee**, Multimedia University, Malaysia
- **Dr. Peter Ho Chiung Ching** Sunway University, Malaysia
- Prof. P.K.Das, IIT Guwahati
- Prof. Nidul Sinha, NIT Silchar
- Prof. R.K.Agrawal, JNU, Delhi
- Prof. Rajni Jindal, DTU, Delhi
- **Dr. Vineeth N Balasubramanian**, IIT Hyderabad
- Dr. Pinki Roy, NIT Silchar
- Dr. Saroj Kumar Biswas, NIT Silchar
- Dr. Suganya Devi, NIT Silchar
- Dr. Tripti Goel, NIT Silchar

Topics to be covered

- Machine Learning Techniques
- Application of Deep Learning in the Field of Medical Imaging
- Pattern Recognition in Medical Image Processing
- Segmentation of MRI Image
- GPT 3 : Overview and applications
- Machine learning for Brain wave analysis
- Location Analytics
- Deep Learning for Computer Vision
- Machine vision analysis vs Human vision understanding: Some issues and challenges

Important Dates

Last date (Online Registration): 22.08.2020 **Confirmation by E-mail:** 22.08.2020 **FDP Dates:** 24.08.2020 to 28.08.2020

Eligibility

This program is open to Faculty members, Research Scholars, PG Students and industrial personnel.

Registration

Registration fee: Nil

Online Registration for the FDP through the below link:

https://forms.gle/pXjeG58P1Qi41sLu9

Certificate

E-certificates will be provided to those participants who have attended the program without any absenteeism.

Contact details

Dr. Malaya Dutta Borah

Assistant Professor, Dept. of CSE NIT Silchar

Email: malayaduttaborah@cse.nits.ac.in

Dr. Naresh Babu Muppalaneni

Assistant Professor, Dept. of CSE, NIT Silchar Email: nareshbabu@cse.nits.ac.in Mob: +91 889 716 5555

Dr. Parismita Sarma,

Assistant Professor, Dept. of IT GUIST, Guwahati

