

**TEQIP III Sponsored  
National Level  
One Week Webinar on  
“Machine Intelligence in Biomedical and Health  
Informatics(MIBHI-2020)”  
20<sup>th</sup> – 24<sup>th</sup> August , 2020**



Organized by  
**Department of Electronics and Communication Engineering,  
National Institute of Technology Silchar, Assam-788010**  
in collaboration with  
**Department of Electronics and Communication Engineering,  
Gauhati University Institute of Science and Technology,  
Guwahati-781014**

As a twinning programme



### About the Institute

National Institute of Technology (NIT) Silchar, an institute of national importance under the NIT Act, was established in 1967 as Regional Engineering College (REC) Silchar in Assam. In the year 2002, it was upgraded to the status of NIT from REC. NIT Silchar has situated on the banks of river Barak and a sprawling campus spread over 600 acres of land on Silchar outskirts. The landscape of NIT Silchar is beautiful with natural lakes and hillocks, surrounded by tea gardens. The climate of Silchar during July is delightful, with an average temperature around 20-25<sup>o</sup>c. NIT Silchar is a fully residential institution with nine hostels for boys and three hostels for girls. NIT Silchar is a teaching and research institute which reflects in the top NIRF rankings.

### About the Department

The department offers B.Tech in Electronics and Communication Engineering and M.Tech in two specializations (i) Micro-Electronics and VLSI Design & (ii) Communication and Signal Processing Engineering. This department also offers a Ph.D. in Electronics and Communication Engineering. The state of art laboratory facilities exists in the department to train the UG, PG, and Ph.D. scholars to carry research in the frontier research areas of Electronics and Communication Engineering. The faculty members are specialized in diverse fields, and there is a commendable research ambiance in the department. Department of Electronics and communication Engineering takes up R & D projects sponsored by various funding agencies such as DST, SERB, BARC, MeitY CSIR, and many more.

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Dr. R. Murugan, ECE, NIT Silchar  
Mr. Anjan Talukdar, ECE, GUIST

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### About the Webinar

The webinar's objectives are to bring the researchers and technocrats from different parts of our country to a common gathering for exchanging and sharing knowledge about the recent developments in machine intelligence in biomedical and health informatics. This webinar aims to provide the latest advances in the field of biomedical and health informatics where information and communication technologies intersect with health, healthcare, life sciences, and biomedicine. This webinar may deal with biomedical applications and their integration, such as clinical information systems, decision support systems, medical and biological imaging informatics, wearable systems, body area/sensor networks, informatics in biological and physiological systems, personalized and pervasive health technologies (u-, p-, m- and e-Health), telemedicine, home healthcare, and wellness management. Topics related to integration include interoperability, protocol-based patient care, evidence-based medicine, and secure patient data methods. This webinar may provide an overview of implementation tools such as MATLAB, Python, raspberry, Arduino, and third: the hands-on practice of Deep Learning Architectures for various image and computer vision applications.

### Resource Persons

Dr. L.N.Sharma, IIT Guwahati  
Dr. Tanveer Ahamed, IIT Indore  
Dr. Praful P Pai, MathWorks, New Delhi  
Mr. Naveen Sharma, Scientist, C.S.I.R. -CSIO, Chandigarh  
Mr. Suraj Dhalwar, Continental Automotive, Bengaluru  
Mr. Mohammed Iliyas, CEO, AltSense, Chennai  
Dr. K. Suganya Devi, NIT Silchar  
Mr. Anjan Talukdar, GUIST  
Dr. Tripti Goel, NIT Silchar  
Dr. R. Murugan, NIT Silchar

### Topics to be covered

- Acquisition, transmission, storage, retrieval, and management of biomedical data.
- Processing and analysis of biomedical and health information.
- Applications of information and communication technologies in the practice of healthcare.
- Patient monitoring and preventive care through technological tools
- Early diagnosis of diseases.
- Discovery of new therapies, and patient-specific treatment protocols leading to improved outcomes.
- Integration of electronic medical and health records.
- Methods of longitudinal data analysis, data mining, and discovery tools.
- Role of AI/ML/DL in biomedical signal/image processing.
- The recent research framework, such as cancer detection, neurological disorder, the retinal image through fundus camera, and biometric recognition.

### Important dates

Last date of receipt of application: 17-August-2020.  
Notification about selection: By email: 18-August-2020.

### Eligibility

This program is open to industry professionals, faculty members, research scholars and UG, PG students of technical institutions, engineering colleges, universities, and other recognized institutions.

### Targeted Participants:

UG/PG Students, Research Scholars, Academicians, and Industry professionals.

### Registration and selection process

Registration fee: Nil

Number of participants is limited to 100

Online Registration link:

<https://forms.gle/oMp1FhixV3nAMS678>

Since the number of seats is limited to 100, the selection will be made on first cum first serve basis, and intimation will be sent to the candidates by email. Certificates will be issued to the participants only after the successful completion of the course.

### Course Materials

Lecture slides and other reference materials will be shared with the registered candidates through email.

### Certification

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

### Contact details

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