

**One week
Virtual/Online Short Term Training
Program (STTP)**

On

“Advanced Machine Learning for Biosignal Data”

8-12 October, 2020

Invited Speakers



Dr. Ram Bilas Pachori
[Click here for profile](#)



Dr. Nilanjan Dey
[Click here for profile](#)



Dr. Shyam Lal
[Click here for profile](#)



Dr. Anil Kumar
[Click here for profile](#)



Dr. Mitul Kumar Ahirwal
[Click here for profile](#)

Chief Patron

Prof. A. M. Rawani,
Director, NIT Raipur

Patron

Dr. (Mrs.) S. Gupta,
Dean (R&C), NIT Raipur

Convener

Dr. Shrish Verma
Dean (AA), NIT Raipur

Course Coordinator

Dr. Narendra. D. Londhe
Electrical Engineering Department
NIT Raipur

Dr. Satya Prakash Sahu
Information Technology department
NIT Raipur

Organizing Committee

Dr. Lalit Kumar Sahu
Dr. Baidyanath Bag
Dr. Tirath Prasad Sahu

For correspondence

Email- nlondhe.ele@nitrr.ac.in,
spsahu.it@nitrr.ac.in

Contact/WhatsApp Number –
7903631620/9039898860/9329173783

Important Dates:

Last Date of receipt of application: 5th October 2020
Notification about acceptance: By Email/WhatsApp

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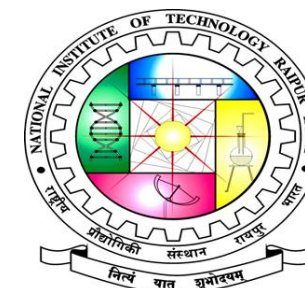
On

**“Advanced Machine Learning for
Biosignal Data”**

8-12 October, 2020



**Electrical Engineering Department
&
Information Technology Department
NIT Raipur**



**National Institute of Technology
Raipur-492010, Chhattisgarh**

About the Institute:

National Institute of Technology Raipur (Formerly Government Engineering College Raipur), situated in the capital of a newly incepted state of Chhattisgarh, has proven to be "Avant-grade" in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our president Hon'ble Dr. Rajendra Prasad on 14th September 1956. the institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the institute has become the National Institute of Technology. It is well connected with Mumbai, Delhi, Hyderabad, Kolkata, Bhopal, Ahmedabad, Bangalore, Chennai and Chandigarh by regular flights and is on the main Howrah-Mumbai railway route. The institute is 5 km from the Raipur railways station and 18 km from airport on NH-6, the Great Eastern Road.

About Electrical Engineering Department:

The department of Electrical Engineering came into existence in 1958. The department offers undergraduate as well as postgraduate programs. These are leading departments of NIT Raipur, running several sponsored projects from the government organizations. These departments provide an outstanding research environment and offers academic program leading to the award of Ph.D. degree. Various multidisciplinary research programs are running in these departments. The academy is envisioned to become a central hub of research and training activity.

About Information Technology Department:

The Department of Information Technology came into existence in year 2000. IT department is the study, research and workplace of approximately 300 students from the 28 states across India. The department provides an outstanding research environment and offers academic program leading to the award of B.Tech., M.Tech., and Ph.D. degree.

Objective:

The aim of this virtual/online training program is to provide an exposure to both basics and recent advances in machine learning and their applications to biosignal data i.e. 1D, 2D (image) and 3D (video) medical data to the students, budding researchers from both academics and industry as well as faculty members. People from both medical and engineering communities can get benefited from this program. This workshop mainly divided into three parts, advanced machine learning algorithms, basic to advanced recent studies on biomedical signal and images, tools for implementation & virtual demo on biomedical signal and images.

Theme/Scope:

In present scenario, the medical disease prognosis, detection and diagnosis suffers from many human errors and looking into the poor patient-doctor ratio world wide, the development of computer assisted technologies is the only solution. Hence, any academic and industry research is going hand on hand to develop such technologies and large work is going on their validation in real time scenario, their generalization with minimal computational efforts on single platform. In view of that, machine learning techniques are being used at large and they are being further developed to cater above tasks with ease. Such very recent development is deep learning which is being vastly being explored now, having advantages of no feature engineering, intelligent deeper learning, learning migration and many more.

Course Contents:

- Introduction to advanced machine learning
- Introduction to deep learning
- Applications to bio potentials
- Applications to medical images
- Online demo/training on implementation of advanced machine learning methods in python and MATLAB

Targeted Participants:

- UG/PG Students, Research Scholars, Academicians, and Industry

Registration Fess (Non-Refundable):

Participants	Amount (₹) (Fees + 18% GST)
Students (UG)	118
Students (PG)	236
PhD Scholars	354
Faculty Member	590
Industry Delegate	1180

Pre-requisite/Desirable:

Knowledge of basics of machine learning, computational platforms like python, MATLAB will help participants to benefit more from this course.

E-Certificates will be issued to the participants only after attending the complete course.

Application in the prescribed format with registration fee in the form of DD/NEFT/RTGS drawn in favor of "Director, NIT Raipur" may please sent via email on or before **5th October 2020**. Participants can also do registration through Google form link [click here](#)

REGISTRATION FORM

Name:.....

Designation:.....

Organization:.....

Qualification:.....

Correspondence Address: :.....

Mobile No......

E-Mail:.....

Registration Fee : Paid herewith in the form of Cash / DD/Online Amount

DD/Transaction No.....

Date:.....

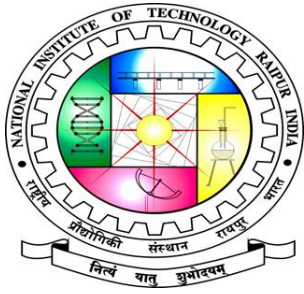
Name of Bank.....

Date:

Place:

Signature of the Participant

Note: Demand draft (DD) should be made in the favor of ‘Director NIT Raipur’, payable at Raipur



National Institute of Technology
One week
Virtual/Online Short Term Training Program (STTP)
On
“Advanced Machine Learning for Biosignal Data”
Venue – Electrical Engineering Department

Schedule

Date	12:30-1:00 PM	1:15-2:15 PM	2:30-3:30 PM
8 th October 2020	Registration/Inauguration	<u>Session1</u> <u>Advanced Machine Learning-I</u> Dr. Ram Bilas Pachori, Professor, IIT Indore	<u>Session2</u> <u>Advanced Machine Learning-I</u> Dr. Ram Bilas Pachori, Professor, IIT Indore
9 th October 2020		<u>Session3</u> <u>Advanced Machine Learning-II</u> Dr. Nilanjan Dey, Assistant Professor Techno India College of Technology & Visiting Fellow, University of Reading, UK	<u>Session4</u> <u>Advanced Machine Learning-II</u> Dr. Nilanjan Dey, Assistant Professor Techno India College of Technology & Visiting Fellow, University of Reading, UK
10 th October 2020		<u>Session5</u> <u>Advanced Machine Learning Applications for Medical Images-I</u> Dr. Shyam Lal, Assistant professor, NIT Karnataka	<u>Session6</u> <u>Advanced Machine Learning Applications for Medical Images-I</u> Dr. Shyam Lal, Assistant professor, NIT Karnataka
11 th October 2020		<u>Session7</u> <u>Advanced Machine Learning Applications for Biopotentials-I</u> Dr. Anil Kumar, Assistant Professor, IIITDM Jabalpur	<u>Session8</u> <u>Advanced Machine Learning Applications for Biopotentials-I</u> Dr. Anil Kumar, Assistant Professor, IIITDM Jabalpur
12 th October 2020		<u>Session7</u> <u>Advanced Machine Learning Tools & Algorithms</u> Dr. Mitul Kumar Ahirwal, Assistant professor, MANIT Bhopal	<u>Session8</u> <u>Advanced Machine Learning Tools & Algorithms</u> Dr. Mitul Kumar Ahirwal, Assistant professor, MANIT Bhopal