

Dept. of Electronics and Telecommunication Engineering

Dept. of Information Technology

18th - 22nd December 2017 Call for participation

Objectives:

Machine Learning (ML) plays a significant role in the modern engineering and information processing systems. It is a rapidly growing field.

Machine Learning is an essential part of pattern recognition, object detection and classification, clustering, data mining and speech recognition etc.

The aim of this STTP is to provide an exposure to both basics and recent advances in Machine Learning to the teaching and research community associated with the departments of Electronics, Electrical, Computer Science, IT, MCA, Bio Medical etc. The trainings will cover pattern recognition and data mining fields specifically.

Topics to be covered:

- Introduction to Machine Learning (ML).
- Hand-on training on MATLAB.
- Introduction to data mining.
- Types of classification, supervised and un-supervised learning.
- Statistical pattern recognition techniques-SVM, KNN etc.
- Dimensionality reduction techniques-PCA etc.
- Optimization techniques-PSO, DE etc.
- Clustering algorithms-KNN etc.
- Applications of ML.
- Applications in data mining and pattern recognition.
- Hands-on training on applications of ML algorithms.
- Q-Learning.

Important Dates:

Last date of receipt of application: 14.12.2017

Notification of selection (by Email):

15.12.2017

Registration Fee:

UG student: 1000/-PG students: 1500-

Faculty: 3000/-

Participants of NIT Raipur: 1000/-

Address for Correspondence:

Dr. R K Chaurasiya (Asst. Prof.)
(Electronics and telecommunication)
Email: rkchaurasiya@nitrr.ac.in
Contact No. +91 9165 97 1639

Dr. P K Mishra (Asst. Prof.) (Dept. of Information Technology) Email: pavanmishra.it@nitrr.ac.in Contact No. +91 7566 01 1780

Mr. T P Sahu (Asst. Prof.) (Dept. of Information Technology) Email: tirsahu.it@nitrr.ac.in Contact No. +91 9826 55 1906

2nd STTP on "MACHINE LEARNING" (Sponsored through TEQIP III)

18th - 22nd December 2017

REGISTRATION FORM FORMAT

(Please use separately attached Registration form for sending the application)

| Name: | |
|--|----|
| Designation: | |
| Organization: | |
| Qualification: | |
| Correspondence Address: | |
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| Tel(M) | |
| Type of participation: | |
| E-Mail: | |
| Registration Fee is paid in the form of | of |
| Online-Transform to Institute's Account. | |
| Amount | |
| NoDate | |
| Name of the | he |
| Bank | |
| Accommodation Required: Yes / No | |
| · | |
| Date: Place: | |
| Signature | |
| Note: | |

■ The detail for online bank-transfer is attached with the registration form.

Chief-Patron

Prof. A. M. Rawani Director, NIT Raipur

Patron

Prof. S. Sanyal Dean (R&C), NIT Raipur

Chairman

Prof. S. Verma Dean (Acad.), NIT Raipur

Conveners

Dr. A. S. Raghuvanshi (HoD), Dept. of E&TC

Coordinators

Dr. R. K. Chaurasiya Asst. Prof., NIT Raipur Dr. P. K. Mishra Asst. Prof., NIT Raipur Mr. T. P. Sahu Asst. Prof., NIT Raipur

Address for Correspondence

Dr. R. K. Chaurasiya (Asst. Prof.)

(Electronics and telecommunication)

Email: rkchaurasiya@nitrr.ac.in Contact No. +91 9165 97 1639

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Mr. T. P. Sahu (Asst. Prof.)

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Email: tirsahu.it@nitrr.ac.in Contact No. +91 9826 55 1906

2nd STTP on "MACHINE LEARNING" (Sponsored through TEQIP III)

18th - 22nd December 2017



Organized by

Dept. of Electronics and Telecommunication Engineering

&

Dept. of Information Technology



National Institute of Technology Raipur-492 010 (Chhattisgarh)

About the Institute:

National Institute of Technology Raipur situated in the capital 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 and all metro cities 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 Departments:

The **Dept.** of **Electronics** and **Telecommunication** came into existence in 1985. The **Dept.** of Information Technology was started in year 2000. The departments aim be national leaders in imparting quality education, carrying out research and technology development. Both the department provides an outstanding research environment and offers academic program leading to the award of B. Tech, M Tech and Ph.D. degrees.

Venue:

NIT Raipur (CG) – 492 010, INDIA

Objectives:

Machine Learning (ML) plays a significant role in the modern engineering and information processing systems. It is a rapidly growing field. Machine Learning is an essential part of pattern recognition, object detection and classification, clustering, data mining and speech recognition etc.

The aim of this STTP is to provide an exposure to both basics and recent advances in Machine Learning to the teaching and research community associated with the departments of Electronics, Electrical, Computer Science, IT, MCA, Bio Medical etc. The trainings will cover pattern recognition and data mining fields specifically.

Speakers:

Expert lectures will be delivered by the faculties working in the field of machine learning. The speakers from **IISc**, **IITs** and **other NITs** have also given their concern to deliver the expert lectures. Hands-on sessions are suitably designed to supplement classroom discussions using **MATLAB** and **WEKA** software.

Eligibility:

Participation in this short term training program (STTP) is open to the under-graduate students, post- graduate students, faculty members, engineers, researchers, and other executives working on diverse fields in electronics engineering, computer engineering, electrical engineering, instrumentation engineering, biomedical engineering, biotechnology, mechanical engineering, etc.

Selection:

The course coordinators reserve the right of selection of participants. The seats are limited to **35 candidates**. The preference will be given to the participants from outside the institute (NIT Raipur). Intimation regarding selection will be sent to the candidates by email as per the schedule. Certificates will be issued to the participants only after attending the complete course. No TA/DA will be paid to the participants. However, paid accommodation and dinner facility may be provided to outside male candidates at the institute hostels (**subjected to availability**).

Topics to be covered:

- Introduction to Machine Learning (ML).
- Hand-on training on MATLAB and its basic toolboxes.
- Introduction to data mining.
- Types of classification, supervised and un-supervised learning.
- Statistical pattern recognition techniques-SVM, KNN etc.
- Dimensionality reduction techniques-PCA, LDA etc.
- Clustering Analysis.
- Q-Learning
- Applications of ML.
- Applications in data mining and pattern recognition.
- Hands-on training on applications of ML algorithms.

Important Dates

Last date of receipt of application:

14.12.2017

Notification of selection (by Email): 15.12.2017

Registration Fee Details (in INR):

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| SI. | Participants | Reg. | | | | |
| No | | Fee | | | | |
| 1. | UG Students | 1,000.00 | | | | |
| 2. | PG/PhD Students | 1,500.00 | | | | |
| 3. | Faculty | 3,000.00 | | | | |
| | /Industry Delegates | | | | | |
| 4. | Internal participants of NIT | 1,000.00 | | | | |
| | Raipur | | | | | |

Scanned copy of Application form in the prescribed format with registration fee in the form online-transfer to the institute account must reach the coordinator (Dr P K Mishra) on or before 14th December, 2017. Registration fee includes registration kit, course material, tea and snacks, and lunch during the program. Fee is non-refundable for selected candidates.

2nd STTP on Machine Learning (Sponsored through TEQIP III)

18th - 22nd December, 2017

REGISTRATION FORM

| Name: | | | | | | |
|--------------|-------------------|-----------|----------------------|---|----------------------|--------------------------|
| Gender: | Paste a recent | | | | | |
| Designation | າ: | | | | | color photograph here |
| Organizatio | n: | | | | | 22020 |
| Qualificatio | n/Currently study | ing in: | | | | |
| Correspond | dence Address: . | | | | | |
| | | | | | | |
| Tel. (M) | | E-l | Mail: | | | |
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| Fee Type: | (Please tick on a | ppropria | te-box) | | | |
| UG Student | PG/PhD | F | aculty | | Internal participant | ts |
| | Student | /I | ndustry Delegates | | of NIT Raipur | |
| _ | nsfer Detail: | | | | | |
| | | | Ref. Number: | | | |
| | | | | | | |
| (Please atta | ach a proof of an | nount tra | nsfer with this form |) | | |
| | | | | | | |
| Date: | | | | | 2: | |
| Place: | | | | | Sigi | nature |

Note: Scanned copy of this registration-form along with Online Payment must reach to the coordinator (Dr Pavan K Mishra, email id: pavanmishra.it@nitrr.ac.in) on or before 14th Dec, 2017.



राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

(Institute of National Importance) G.E. Road, Raipur - 492010 (CG) Phone: (0771) 22 54 200 Fax: (0771) 22 54 600

Email: director.nitrr@rediffmail.com Website: www.nitrr.ac.in

Bank Details of NIT Raipur is as under:

Bank Name: Bank Branch:

Bank Address:

City:

Country:

Account No:

Account Name:

Bank Branch Code:

IFSC Code: Swift Code:

Phone No. of Branch:

State Bank of India

G.C.E.T. Branch

G.E. Road, Raipur. (C.G.) Pin - 492010.

Raipur (C.G.)

India

30054181310

Director NIT Raipur

02852

SBIN0002852 SBININBB646

0771-4040791/795

Dy. Registrar (F&A) MLT Raipur (C.G.)