One Week

Self-Financed Workshop
On
Data Analytics and Machine Learning with
R (DAMLR-2017)

From: 29th May- 2nd June, 2017

Data Analytics and
Machine Learning
with R
DAMLR-2017

Organized by

Department of Computer Science & Engineering
Motilal Nehru National Institute of Technology Allahabad
Allahabad-211004, Uttar Pradesh, India

THE INSTITUTE

Motilal Nehru National Institute of Technology (MNNIT) Allahabad is one of the premier National Institute of Technology (NIT) in India. It is committed to achieve quality and excellence in academic pursuits. Established in 1961, as a Regional Engineering College, a joint enterprise of Government of India (GOI) and Government of Uttar Pradesh, the institute was transformed into NIT on June 26, 2002. With the enactment of NIT Act-2007, the Institute has been granted the status of institution of national importance w.e.f. August 15, 2007.

The Institute offers various undergraduate and postgraduate courses such as B.Tech., M.Tech., MCA, MBA, M.Sc., M.S.W and Ph.D. degree. It has been recognized by GOI as one of the Quality Improvement Programme (QIP) centre for M.Tech. and Ph.D. program. Also, it is a lead Institution under World Bank funded GOI Project on Technical Education Quality Improvement Programme (TEQIP).

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

For the first time in India under graduate course in Computer Science and Engineering was offered in 1977 under Electrical Engineering Department with a modest strength of 10 students.

The Department of Computer Science & Engineering offers courses leading to a Bachelor of Technology in Computer Science & Engineering and Bachelor of Technology in Information Technology. It also offers a Master of Technology in Computer Science & Engineering, Master of Technology in Software Engineering, Master of Technology in Information Security, and Master of Computer Application (M.C.A.). Further, the department also enrolls candidates for Ph.D. program.

ALLAHABAD

The city of Allahabad is among the largest cities of Uttar Pradesh. It is situated at the confluence of three rivers- Ganga, Yamuna and the mythological Saraswati. The sacred meeting point is known as Sangam. The city also known as PRAYAG has many governmental institutions which include MNNIT Allahabad, Allahabad University , HRI, IIIT Allahabad, High Court of UP, AGUP, CDA Pension, State Government Board and various tourist places like Anand Bhawan, Khusroo Bagh etc.

COMMITTEE

ORGANIZING COMITTEE

Patron
 Director, M.N.N.I.T. Allahabad

Chairman
Head, Department of Computer Science and Engineering

Course Coordinators
Prof. M.M. Gore, Department of C.S.E.
Dr. A. K. Singh, Department of C.S.E.

Student Coordinators
1. Mr. Vijay Kumar Dwivedi, Department of C.S.E.
2. Mr. Abdul Aleem, Department of C.S.E.
3. Mrs. Jagriti Singh, Department of C.S.E.
4. Mr. Mayank Singh Rana, Department of C.S.E.

ADVISORY COMMITTEE
All the Professors of Computer Science and Engineering Department.

ADDRESS FOR COMMUNICATION

Complete registration form, accompanied by the demand draft (or NEFT details) should reach the course coordinator on or before 16th May, 2017. The applicants are also requested to e-mail a scanned copy of the application. The contact details are:

Co-ordinator DAMLR-2017
Department of Computer Science and Engineering
Motilal Nehru National Institute of Technology Allahabad
Allahabad-211004
E-mail: 2016rcs06@mnnit.ac.in

For any further information / assistance you may contact following student co-ordinators:
Mr. Vijay Kumar Dwivedi – 09235668045
Mr. Abdul Aleem - 08800218068
Mrs. Jagriti Singh – singh.jagriti5@gmail.com
Mr. Mayank Singh Rana - 7830072869

Note: Please write the name of the course (DAMLR-2017) *on top of the envelope*

INTRODUCTION

R is an open-source, powerful language for data analytics and statistical computing. R facilitates user to extend the built-in statistical procedures for implementation of new statistical methodologies. R is the most used tool for machine learning techniques. The workshop is planned to illustrate employment of various statistical and machine learning techniques using R.

OBJECTIVES AND PREAMBLE

The objectives of the workshop are:

- To strengthen knowledge of faculty members, research scholars and students in the field of Machine Learning.
- To learn R and its use in Statistical and Machine Learning applications.

The program will first take up the basics of Statistics, Linear Algebra, Machine Learning and R followed by advanced Machine Learning Techniques in detail with their implementation.

TOPIC TO BE COVERED

The course will contain following topics:

- Introduction to R and R set-up
- Basic Statistics, Probability Distribution and Linear Algebra
- Linear and Logistic Regression
- Supervised Classification {Naïve Bayes, Decision Trees, Random Forest and SVM}
- Introduction to Machine Learning
- Machine Learning using Neural Network
- Genetic Algorithms with R
- Basic Collaborative Recommender System

COURSE OUTCOME

After completion of this workshop, participants would be well familiar with R tool and would be able to use with confidence statistical and machine learning related features of R.

COURSE DURATION

One Week (29th May to 2nd June 2017)

WHO SHOULD ATTEND

The primary audience would be faculty members and Ph.D. students of educational institutions. It is also open for PG students and industry personnel.

IMPORTANT DATES

Last Date for Receipt of Application Form: ~~16th~~ **20th May, 2017**
Selection Notification on ~~19th~~ **22nd May, 2017**
Course Commences on 29th May, 2017

RESOURCE PERSON

Faculty members from IITs, NITs, and other reputed institutes.

REGISTRATION

To register for this course the applicants will have to pay fees in advance as per the following details

Category	Fees (Rs.)
Industry Personnel	**5000/-**
Faculty	**4000/-**
Research Scholars/ PG Students	**2000/-**

Registration fee can be submitted through
D.D in **favour of "DAMLR-2017" payable at Allahabad** or via **NEFT, A/C Name: DAMLR-2017, A/C Number: 718400301000252, Vijaya Bank, Branch: MNNIT Allahabad, IFSC: VIJB0007184**.

The lodging and boarding arrangements for candidates from outside Allahabad can be made on request for limited number of accommodations. The charges of lodging and boarding are separate from the registration fee.

The participants can download Registration Form available on the MNNIT Allahabad web site or otherwise can use the registration form available of this pamphlet. Completed registration form along with the D.D. and payment details should reach at the communication address by post or E-mail (in case of NEFT payment with transaction details) on or before 16th May, 2017. The list of participants will be displayed at the MNNIT Allahabad website and applicants will also be intimated by E-mail on or before 19th May, 2017.

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REGISTRATION FORM

Name (in Block Letters) _____

Date of Birth _____ Sex: Male/Female

Highest Qualification:_____

Organization: _____

Designation (Faculty / Research Scholar / PG Student / Industry Personnel)

Experience: _____ Years ____Months

Address of Correspondence:

_____

_____City:_____Pincode:_____

Mobile No._____

E-mail _____

Accommodation needed   Yes/No

PAYMENT DETAILS:

Draft No. _____ Date:_____

Issuing Bank and Branch (with code) _____

(In favour of **DAMLR-2017'**, payable at 'Allahabad')

For NEFT: Transaction ID_____Amount_____Date:_____

(Signature of Applicant)