ABOUT MNIT

Malaviya National Institute of Technology (MNIT) Jaipur is one of the NITs established by the Ministry of Human Resource Development, Government of India. The Institute, earlier known as MREC, was established in 1963 as a joint venture of the state and central Governments. Later in 2002, the college was given the status of National Institute of Technology and on August 15, 2007, proclaimed Institute of National Importance through an Act of Parliament. MNIT campus spreads over 325 acres of lush green area in the prime location of Jaipur city. At present, in addition to research, consultancy, and developmental activities, the Institute offers UG and PG (M. Tech./M.Sc. & Ph.D.) level courses to about 5000 students in almost all leading fields of engineering, technology, management, and sciences.



DEPARTMENT OF ELECTRICAL ENGINEERING

The Electrical Engineering Department is one of the oldest departments of the institute which was established in the year 1963. At present, the department offers undergraduate courses in Electrical Engineering along with postgraduate courses in Power Systems, Power Electronics and drives, and Power Systems Management. The department has undertaken several research projects/schemes with financial assistance from AICTE, DST, and MHRD, including international collaborative research projects.

ABOUT WORKSHOP

The workshop is designed for understanding and implementing Artificial Intelligence (AI) and Machine Learning (ML) techniques in different fields. The applications of these techniques are quite broad including areas of engineering, business, and medicine. With the growing applications of AI/ML, engineering UG/PG students and faculties need to gain hands-on experience in implementing AI/ML techniques on different projects. This workshop will include lectures and hands-on lab sessions for the participants to learn in-depth theoretical concepts of different AI and ML techniques and their programming implementation in Python.

PATRON

Prof. N P Padhy Director, MNIT Jaipur

CONVENER

Prof. Harpal Tiwari Professor & Head Department of Electrical Engg., MNIT Jaipur

COORDINATORS

Prof. Rajesh Kumar Professor M: +91-9549654481, <u>rkumar.ee@mnit.ac.in</u>

Dr. Dipti Saxena Associate Professor M: +91-9549654476, <u>dsaxena.ee@mnit.ac.in</u>

Dr. Ravita Lamba Assistant Professor M: +91-9549650797, <u>ravita.ee@mnit.ac.in</u> Department of Electrical Engg., MNIT Jaipur



IMPORTANT DATES

Last Date of Registration	1 Mar 2024
Confirmation of Selection	2 Mar 2024
Workshop Start Date	4 Mar 2024

Malaviya National Institute of Technology Jaipur

announces

Workshop (Hybrid Mode) under Diamond Jubilee Celebrations

on

Machine Learning: Concept & Implementation during March 4-8, 2024

Organized by Robotics and Machine Analytics (RAMAN) Lab Department of Electrical Engineering, Malaviya National Institute of Technology Jaipur, Rajasthan-302017, India <u>www.mnit.ac.in</u>

REGISTRATION FORM Machine Learning: Concept & Implementation (Mar 4-8, 2024)

Name.....

Category (Student: UG, PG, PhD/Faculty):
Specialization (For PG/Faculty only):
Department, Semester:

Institute:.....

Mailing Address:

Mobile:

Email:....

Registration fee Details:

Mode of payment (NEFT/IMPS):

Transaction No:

Amount Paid:

The above-mentioned information is accurate to the best of my knowledge at the time of completion of the form. If selected, I agree to abide by the rules and regulations of the program and MNIT Jaipur.

Date:

Signature of Applicant

.

.

The applicant is permitted to participate in the above program for the mentioned duration.

Date:

Signature of Sponsoring Authority with seal

COURSE CONTENTS

- Supervised Learning: Linear Regression, Logistic Regression, Regularization, Classification, Notion of generalization, Decision Tree Classifiers, Ensemble, Random Forest, Kernels, Support Vector Machine, Naïve Bayes.
- Unsupervised Learning: k-Means, Hierarchical Cluster Analysis, Dimensionality Reduction: PCA
- Reinforcement Learning: Q Learning, SARSA, DQN.
- Deep Learning: Neural networks, deep neural networks, convolutional neural networks, recurrent neural networks, long short-term memory (LSTM), generative adversarial networks (GANs)
- Hands-on with Python: Introduction to modules, IDEs, packages, data types (variables, lists, tuples, dictionaries, sets, files I/O, database handling, numpy, and Pandas library and machine learning algorithms.

REGISTRATION FEES

*	UG	Rs. 885/-
*	PG/PhD students	Rs. 1118/-
*	Faculty	Rs. 1770/-
*	Industry	Rs. 2360/-

Note: The registration fee includes 18 % GST.

PAYMENT MODE (NEFT/IMPS):

Name: Registrar (Sponsored Research) MNIT Account No.: 676801700388 IFSC CODE: ICIC0006768 (ICICI BANK, MNIT)

REGISTRATION FORM DETAILS

After fee submission, the applicant must register themselves by submitting details on <u>Google Form Link</u> Further details for the workshop and instructions for filling the form may be found on <u>Raman Lab Website</u>. The applicant may also mail the filled registration form with the appropriate requirements to the address of correspondence mentioned.

All registration forms must be received by 1 Mar, 2024. Registration fee is non-refundable.

The selection for the workshop will be on 'first come first served' basis. The confirmation of the selection to attend the course will be emailed by the mentioned date. For further details about the course, contact ramanlabmnit@gmail.com

ADDRESS FOR CORRESPONDENCE

Robotics and Machine Analytics (RAMAN) Lab,

Department of Electrical Engineering,

Malaviya National Institute of Technology Jaipur,

Rajasthan-302017, India

Email: ramanlabmnit@gmail.com

Mob: +91 9784466445