Registration Form

Who may benefit?

Faculty, Scientists, Research scholars and P.G. students from academic institutes, would benefit from the proposed course. As participants are expected from all over India, this course would provide an excellent opportunity for the participants to interact with each another and discuss problems and solutions of mutual interest on online platform.

Speakers

Faculty members of NIT Raipur

Course Duration and Mode

Mode: Online Mode

Time – 03:00PM- 5:00PM

Date: 27-31, October 2020

Registration Fee

There is no Registration fee from any participant. On completion of the program on all the days, participants will be awarded a e-Certificate of participation by Institute. The seats are limited to 50 only and applications, the participant will be selected on first-cum-first basis. Please register online to attend the Course.

Address of Correspondence

Course Coordinators

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Department of Computer Applications

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Department of Bio-Medical Engineering

Online Short-Term Course
on
Machine Learning in Health Care
27-31, October 2020
Patron
Dr. A. M. Rawani
Director, NIT Raipur

Chairperson
Dr. S. L. Sinha
Professor & Head
Department of Computer Applications

Course Coordinators
Dr. Kesari Verma
Department of Computer Applications
Dr. Bikesh Kumar Singh
Department of Biomedical Engineering

NATIONAL INSTITUTE OF ECHNOLOGY RAIPUR
(Institute of National Importance)
G.E. Road, Raipur - 492010 (C.G)

About the Course

The World Health Organization (WHO) declared the coronavirus (COVID-19) outbreak a pandemic. In the year 2020, the novel coronavirus disease (nCOVID-19), its spreading nature and detection, becomes the most challenging problem for the world. In this difficult time the online mode of teaching is one of the essential for spreading the knowledge among the researchers and students.

The objective of this course is to impart necessary knowledge of the mathematical foundations needed for Machine Learning and develop programming skills required to build data science applications.

The learning outcomes of this course

- Demonstrating the understanding of the mathematical foundations needed for Machine Learning
- Collect, explore, clean, and manipulate data.
- Implement models such as k-nearest Neighbors, Naive Bayes, linear and logistic regression, decision trees, neural networks and clustering.
- Build Machine Learning applications using MATLAB.

About the NIT Raipur

National Institute of Technology, Raipur is situated in the capital of Chhattisgarh. The Institute was founded by first President of India Hon'ble Dr. Rajendra Prasad on 14th September 1956. Based on student's intake in B. Tech. Course, it is the largest NIT in India. Presently, the institute offers 12 undergraduate and 6 postgraduate courses including MCA and M. Tech. in Applied Geology. The institute also offers Ph. D programs, R & D activities, testing consultancy and other extension services.

Contents

The course covers following contents:

- Introduction to Machine Learning
- Types and sources of data
- Techniques of data preprocessing
- Classification techniques and Practical demonstration of various classification Algorithms
- Clustering, Theory and demonstration of clustering algorithms
- Applications of Machine Learning in Health care.
    Practical Implementation
- Python
- MATLAB
- Discussion on Real-time projects

Certificate

The e-Certificate will be provided to participants after the successfully completion of the course.