About Institute

Prof. (Dr.) Pinakeswar Mahanta

Director, NIT Arunachal Pradesh

Patron

Chairman

Prof. M. K. Shome
Dept. of M & H, NIT Arunachal Pradesh

Co-Coordinator

Dr. Deepak Gupta NIT Arunachal Pradesh
Dr. Utpal Kumar Saha NIT Arunachal Pradesh

Organizing Committee

Prof. R. P. Sharma	NIT Arunachal Pradesh
Dr. Pratap Kumar Swain	NIT Arunachal Pradesh
Dr. Susanta Maity	NIT Arunachal Pradesh
Dr. A. Vanav Kumar	NIT Arunachal Pradesh
Dr. Tushar Dhabal Das	NIT Arunachal Pradesh
Dr. Shakti Prasad	NIT Arunachal Pradesh
Dr. Debjit Dutta	NIT Arunachal Pradesh

The National Institute of Technology, Arunachal Pradesh was inaugurated on 18th August, 2010 as a member of a group of ten new NITs. These new NITs were established as centers of excellence in technical education to combat the growing need of technological professionals in India as well as in the Word. Despite of few geographical constraints and lack of modern state of art facilities, the institute has thrived through rigorous challenges and has evolved to see the new heights with present capacity of 854 students pursuing various bachelor, master as well as doctorate degrees from various departments

About Department

Department of Basic & Applied Science has been established right at the inception of the institute in 2010. Currently, the department comprises of Physics, Chemistry, and Mathematics. The department has eleven numbers of faculty members and having specialized in advance areas of Physics, Chemistry and Mathematics. The faculty members of the department, besides teaching and research work, are actively participating in administrative and developmental activities of the institute for its future growth. The goal of the department is to impart theoretical and practical knowledge to the students in the area of basic and applied science. The department desires that every student will acquire academic excellence, technical skills, scientific aptitude, temper and holistic development through practical oriented learning methodology. The department is striving to establish new academic and research disciplines while embracing interactions with the real world through a strong emphasis on fundamental research. The department got good number of sponsored research projects from external agencies like SERB, CSIR, ICMR etc. The department also offers Ph.D. program in Physics, Chemistry and Mathematics in order to nurture young minds towards scientific challenges.



AICTE Training and Learning Academy



Sponsored One Week Online FDP

on

Mathematics for Machine Learning

25th to 30th January 2021



<u>Coordinator</u> Dr. Karam Ratan Singh

Assistant Professor
Department of Basic and Applied Science
NIT -Arunachal Pradesh

Organized By

Department of Basic and Applied Science NIT Arunachal Pradesh Yupia-791112, Arunachal Pradesh, India

About FDP

This is a five-day workshop on Mathematics for Machine learning. The workshop will introduce the fundamental mathematics concepts required for Machine Learning and its applications.

Course Contents

The Course provides in-depth coverage of the following important emerging areas along with hands-on-training on the respective state of the art Open Source Simulators and other Tools:

Date	Session 1 (10:00 AM - 11:30 AM)	Session 2 (12:00 PM - 1:30 PM)	Session 3 (2:30 PM - 4:00 PM
25.01.2021	Machine Learning - Geometric insights	Linear and Polynomial Regression	Model Evaluation - Cross Validation
27.01.2021	L1 and L2 Regularizations	Gradient Descent	Logistic and Softmax Classification
28.01.2021	Support Vector Machines and Kernels	Decision Trees and Bagging	Boosting and Hyperparameter tuning
29.01.2021	Dimensionality Reduction - PCA and tSNE	Clustering	Topological Data Analysis
30.01.2021	Deep Neural Networks	Backpropagation and Optimizations	Recurrent Neural Networks and Embedding

Registration FEE

There is no registration fee to attend this programme. Participants willing to attend this online FDP should have the provision of laptop/desktop with good quality internet connections and other audio-visual facilities, as required for online training.



Eligibility Criteria

Faculty members and research scholars from AICTE approved Engineering and polytechnic Institutes and Industrial persons are eligible to participate. Participants are required to fill online registration form. Detail is given in registration process.

Speakers

The resource persons for the program shall include professionals from industries.

Registration Process

Participants interested to attend this program need to make compulsory online registration on the below mentioned link:

https://forms.gle/vR3Jxtf1tjstTw8FA

The last date of online registration is 23rd January, 2021 Shortlisted candidates will be informed through their email on 24th January, 2021.

Online quiz will be conducted on the last day along with taking feedback and those who score more than 60% marks will be termed as successful candidates. Those who have attendance 80% or more and also score more than 60% in the test will be issued a digital certificate by the ATAL Academy.

For more information please visit the website: www.nitpap.ac.in.

Address for correspondence

Dr. Karam Ratan Singh
FDP Coordinator
Department of Basic and Applied Science
NIT Arunachal Pradesh
Yupia-791112, Arunachal Pradesh, India
Contact No: +919436271135
Email: karamratan@nitap.ac.in

Important Dates

Date of Event : 25th Jan. 2021 – 30th Jan. 2021

Registration Closed: 23th Jan. 2021