PMRF-ISSS Teaching Programme Prime Minister Research Fellowship students' teaching requirement

facilitated by the Institute of Smart Structures and Systems



Module PMRF-ISSS012/2024 Machine Learning: A Practical Approach

Name of the PMRF student

Sagnik Acharya

Required background of the students taught

Basic knowledge of school level linear algebra is preferred. Python programming is preferred but not mandatory.



Details of the content of the module

This course will cover some basic and advanced concepts in Machine Learning. The lectures will include real-world examples through coding sessions and will be accompanied by discussion sessions as well.

The following topics will be covered in detail:

Week 1 – Linear Regression

Week 2 – Logistic Regression

Week 3 – SVD, PCA and Hyperparameter Tuning

Week 4 – Support Vector Machines (SVMs)

Week 5, 6 – Artificial Neural Networks (ANNs) and their optimization strategies

Week 7 – Convolutional Neural Networks (CNNs)

Week 8 – ResNets, Inception Network

Week 9 – Object Detection

Schedule of the module

Start Date: 1st February 2024

End Date: 28th March 2024

Lecture Timings: Thursday 6 – 7 PM

Discussion Timings: Saturday 11 AM – 12 PM

Meeting link : Will be shared later

Link

Contact email ID: isss.forum@gmail.com

Registration link: https://forms.gle/LuTNCmA3cB3aBJG3A