Module PMRF-ISSS145/II/2024

Neural network modelling and identification of dynamical systems

Name of the PMRF student

Varsha P

Required background of the students taught

Civil Engineering
Mechanical Engineering
Basic knowledge of structural dynamics is expected

Details of the content of the module

Module 1: Introduction to Dynamical Systems and Neural Networks

Module 2: NN Architectures, Training Neural Networks

Module 3: System Identification Basics, Linear vs. Nonlinear System Identification

Module 4: Data Preparation and Preprocessing

Module 5: NN Models for Dynamical Systems: Time-Series Prediction, RNN, LSTM

Module 6: Implementing Neural Networks for System Identification

Module 7: Advanced Neural Network Architectures, Hybrid models

Module 8: Applications in Control Systems

Schedule of the module

Start date: 14th October 2024

Total number of hours: 42 hours

Day and Time: MWF 6 pm

Mode of teaching: Upload recorded sessions

Meeting link : Will be shared later

Link: https://forms.gle/3dgLNXdbDzRBWCGd9

Contact email ID: isss.forum@gmail.com

Registration link: