

# PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement  
facilitated by the Institute of Smart Structures and Systems



Module PMRF-ISSS002

## Introduction to Deep Learning with Python

### Name of the PMRF student

Nareddy Kartheek Kumar Reddy, IISc

### Required background of the students taught

Any UG or PG student  
interested in Deep Learning

### Faculty coordinator

Dr. Rajath Vasudevamurthy, Department of  
Electronics and Communication, BMSCE, Bangalore

### Online session coordinator

Avinash Upadhyay, Prajna Karnik



### Details of the content of the module

Session 1: Introduction to Deep Learning  
Session 2: Setting up Python Environment  
Session 3: Import Python Packages  
Session 4: Fully Connected Neural Networks (Level 1)  
Session 5: Fully Connected Neural Networks (Level 2)  
Session 6: Setup Pytorch and minds-on programming  
Session 7: Hands-on: Programming DL functions  
Session 8: Convolutional Neural Networks  
Session 9: Hands-on: Know CIFAR-10  
Session 10: Hands-on: Build, Train and Analyze CNN  
Session 11: CNN Architectures in the Modern World  
Session 12: Hands-on: Implement CNN Architectures  
Session 13: Visualization and Interpretation  
Session 14: Advanced CNN Architectures

### Schedule of the module

Start Date: 02-July-2021

End Date: October 2021

Lecture day: Friday

Lecture Time: 6PM-8PM

Meeting link

<https://meet.google.com/tay-yqbu-gzi>

Contact email ID: [issf.forum@gmail.com](mailto:issf.forum@gmail.com)

Registration link:

<https://forms.gle/6KH5JhwoR3r5qNT8>