Artificial Intelligence and Machine Learning

June 19 - 27, 2023

Course Content

Introduction to Artificial Intelligence (AI) and Machine Learning (ML). (1.5 hours) AI as a Service Platform, Introduction to Python Programming Language, Keras and

Tensorflow. (1.5 hrs lab)

Supervised and Unsupervised Machine Learning, More on ML Approaches:

Clustering Algorithms (3 hrs + 3 hrs lab)

Neural Networks: Feed-forward Networks, Backpropagation, Optimization and Regularization. (3 hrs + 3 hrs lab)

Deep Learning, Convolutional Neural Networks (CNNs), Classification using CNNs,

Applications (1.5 hrs + 1.5 hrs lab)

CNN models for Object Detection and Related Problems (1.5 hrs + 1.5 hrs lab)

Language Models and ChatGPT (1.5 hrs)

Recent Trends in Deep Learning (1.5 hrs)