Joint Winter Faculty Development Program on Machine Learning for Computer Vision

June 29 to July 08, 2020

Tentative Schedule

Date	10:15-10:40	10:45-00:45	12: 45– 14:30	14:30- 16:00	
June 29, 2020	Inaugural	Intro CV (Prof. PK Biswas)	Lunch	Lab 1: Introduction to Python through Jupyter Notebook and Google Colab. [14:30 -16:00]	
	10:30-12:30		12:30 PM – 14:30 PM	14:30 onward	
June 30, 2020	Intro Image Processing (Prof. PK Biswas)		Lunch Time	Lab 2: Image processing problems- Edge detection, image enhancement and related algorithms [14:30 -16:00]	
July 01, 2020	Intro AI and ML (Dr. Partha Pratim Roy)			Lab 3: Understanding of Python libraries and installing Anaconda, TensorFlow, First program on Image classification using ML algorithms [14:30 -16:30]	Queries, Problem Solving, Projects and Research Discussion [16:35 -17:05]
July 02, 2020	Neural Networks and Back Propagation (Dr. Partha Pratim Roy)			Neural Networks: Regularization and Optimization (Dr. Partha Pratim Roy) [14:30-16:30]	Lab 4: Neural network implementation for image classification and feature extraction. [16:35-18:05]
July 03, 2020	Local Patterns and Convolution Neural Networks (Dr. Santosh Kr. Vipparthi)			Lab 5: Implementation of Local Patterns and Convolution operations using Python [14:30 -16:30]	
July 04, 2020	Deep CNN and Applications (Dr. Santosh Kr. Vipparthi)			Lab 6: Implementation of Image Classification using CNN with Transfer Learning [14:30 -16:30]	Queries, Problem Solving, Projects and Research Discussion [16:35 -17:05]
July 05, 2020	Object Detection using CNN (Prof. Aparajita Ojha)			No session [Take home assignment]	
July 06, 2020	Object Detection using CNN (Contd.) (Prof. Aparajita Ojha)			Lab 7: YOLO the and Darknet Framework [14:30 -16:30]	
July 07, 2020	NVIDIA Deep Learning Algorithms and implementation [9:30-12:30]			NVIDIA Deep Learning Algorithms and implementation [14:00-18:00 with small breaks]	
July 08, 2020	Motion Estimation using CNN (Dr Subramanyam Morala)		Valedictory function		