Joint Winter Faculty Development Programme on Deep Learning and Applications

December 9-13, 2019

Tentative Schedule

Date	9:15 AM to 11:00AM	11:00AM to 11:15AM	11:15AM to 13:15PM	13:15PM to 14:00PM	14:15PM to 16:15PM	16:15PM to 16:30PM	16:30PM to 18:30PM
9/12/2019	Inaugral (9:15AM to 9:45AM) Introduction to deep learning Lecture 1 [Prof A. Ojha, IIITDMJ] (9:45-11:00 AM)		Feed Forward NN and Back Propogation, Deep NN Lecture 2 [Prof A. Ojha, IIITDMJ]		Practice session on Python Programming [Local Lab session 1]		Introduction to TensorFlow, Keras, program on ANN classifier [Local Lab session 2]
10/12/2019	Regularization and Optimization in Deep NN Lecture 3 [Dr. Santosh Vipparthi, MNITJ]		Introduction to CNN Lecture 4 [Prof. Chakravarthy Bhagvati, Univ of Hyderabad]		CNN for Object Detection and Character Recognition Lecture 5 [Prof. Chakravarthy Bhagvati, Univ of Hyderabad]		CNN for Character Recognition Transfer learning, Using Google Colab [Local Lab session 3]
11/12/2019	Introduction to Autoencoders Lecture 6 [Dr. S. Murala, IIT Ropar]	Tea Break	Generative Adversarial Network (GAN) Lecture 7 [Dr. S. Murala, , IIT Ropar]	Lunch Break	Building and Training Autoencoder Model [Local Lab Session 4]	Tea Break	GAN Applications [Local Lab Session 5 upto 18:00] Quiz 1 18:00-18:30
12/12/2019	Introduction to Recurrent Neural Networks (RNN) Lecture 8 [Dr. Amar P. Azad, IBM]		LSTM, GRU, Attention Models, Applications Lecture 9 [Dr. Amar P. Azad, IBM]		Demo and practice Session on RNN Applications Demo and Local Lab Session 6 [Dr. Amar P. Azad, IBM]		RNN Applications (Contd.) [Local Lab Session 7]
13/12/2020	Introduction to Reinforcement Learning (RL) Lecture 10 [Dr. Madan Mohan Dabbeeru, Rakuten, India]		An introduction to Q-Learning and Deep RL Lecture 11 [Dr. Madan Mohan Dabbeeru, Rakuten, India]		Practice Session on RL Applications [Local Lab Session 8 14:15- 15:45] Quiz 2 15:45-16:15		Participants Feedback + Certificate Distribution and Local Valedictory Session

Joint Valedictory Session 13:15-13:45 on Dec 13, 2019: All coordinators are requested to join.