

Mar Baselios College of Engineering and Technology (Autonomous)
Thiruvananthapuram

Six-days AICTE sponsored STTP on “**High Performance Computing and Deep Learning for Image, Text Analysis**” from 22 Feb 2021 to 27 Feb 2021.

Dates	9:30 AM to 11:00 AM	11:00 AM to 11:10 AM	11:10 AM to 12.30 PM	12.30 PM to 1.30 PM	1.30 PM to 4:15 PM	4:15 PM to 4:30 PM
Day 1 22.2.2021	Introduction to High Performance Computing and Deep Learning for Image, Text Analysis Dr. Deepak Garg, Bennett University	Tea	Overview of Deep Learning Architectures – CNN Hands-on sessions on Deep Learning architectures – CNN, Transfer Learning Dr. Vishnukumar S, CUSAT	Lunch	Optimization Algorithm for Deep learning Dr. Pranesh Das NIT Calicut	Tea
Day 2 23.2.2021	Deep Generative Models Recurrent Neural Networks (RNN) Dr. Tessa Mathew MBCET	Tea	Autoencoders, Variational Autoencoders Hands on with Autoencoders Ms. Jesna Mohan MBCET	Lunch	Advanced Deep Learning Topics in CNN 3D CNN, YOLO v3, RefineDet, M2Det, Image Segmentation, Style Transfer Mr. Binu Jose A Research Scholar NIT, Calicut	Tea
Day 3 24.2.2021	Deep Learning Frameworks TensorFlow Dr. Suneet Kumar Gupta Bennett University	Tea	Deep Learning Frameworks PyTorch Dr. Suneet Kumar Gupta Bennett University	Lunch	Unsupervised Deep Learning Sparse Coding, Restricted Boltzman Machine, Deep Belief Networks Dr. Suneet Kumar Gupta Bennett University	Tea

Day 4 25.2.2021	Advanced Deep Learning Topics in RNN Video to Video Synthesis, BERT, Self-Attention Models Dr. Tapas Badal Bennett University	Tea	Deep Learning Hands on for segmentation, Advanced RNN topics Dr. Vipul Kumar Mishra Bennett University	Lunch	Pruning, Matrix Factorization, Quantization, Encoding Dr. Vipul Kumar Mishra Bennett University	Tea
Day 5 26.2.2021	Reinforcement Learning Markov decision Process, Value based RL, Policy base RL Dr. Hiren Kumar Thakkar Bennett University	Tea	Model based RL, Q-Learning, Bellman Equation Dr. Hiren Kumar Thakkar Bennett University	Lunch	Recent Trends in Deep Learning Dr. Tapas Badal Bennett University	Tea
Day 6 27.2.2021	DNN-Mathematical model- Parallel Processing Familiarization of Tools. Dr. Harini S VIT	Tea	Demonstration of performance comparison and training time of CPU/GPU/TPU Ms. Aswathy Ravikumar Research Scholar, VIT	Lunch	Applications and Tools, Spark Dr. Harini S VIT and Ms. Aswathy Ravikumar Research Scholar, VIT	Tea