

Indian Statistical Institute

Applied Statistics Unit

SEMINAR NOTICE

Speaker: Amritendu Mukherjee, NeuroPixel.AI Labs

Title: Evolutionary Journey of Deep Generative Models

Date: 06 July, 2023

Time: 16:15 PM

Venue: ASU Seminar Room

Online Platform: Google Meet (meet.google.com/rdb-mmix-jnc)

Abstract: Generative Networks primarily approaches the problem of estimating the distribution and sampling from the same by observing the data. In this Talk, I would discuss the evolutionary journey [and theoretical foundations] of Generative Networks through Gaussian Mixture Model (GMM), Auto-Encoder & Variational Auto-Encoder (VAE), Generative Adversarial Network (GAN) and Score-based Diffusion Model.

Also, I would like to talk about some of the problem statements [Synthetic Model Generation, Attribute Modification, Virtual Try-On etc.] that we are trying to solve at NeuroPixel.AI Labs with the help of DGMs [e.g. StyleGAN, InsetGAN, Stable Diffusion etc.] in conjunction with other DNN stacks like Spatial Transformation Network (STN) and Optical Flow Network (FN). Finally, I would take the audience through a couple of interim Demos of the solution that we've been building at NeuroPixel.

All are invited to attend.