

# GANs MASTERCLASS

## Pre-requisites

1. Machine Learning & Deep Learning Basics.
  2. Math behind Neural Networks.
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## Syllabus

### 1. Introduction to GANs:

- a. Deep Learning Refresher
- b. Need for Generative Models
- c. Brief History of Generative Models
- d. Introduction to GANs

### 2. GANs Theory Deep Dive:

- a. Vanilla GAN architecture
- b. Loss function
- c. Training GANs / Optimising the loss function
- d. Limitations of GANs

### 3. Standard GAN Architectures:

(Any 2 in depth. Overview of the Rest)

- a. CycleGAN
- b. InfoGAN
- c. BiGAN
- d. Text2ImageGAN
- e. StyleGAN
- f. DiscoGAN

### 4. Implementation of GAN using Tensorflow

