## **ABSTRACT**

## **TOPIC:** Image Cartoonization using GAN

Image Cartoonization using GAN plans to create an application that will transform an image into a cartoon. This proposes a solution to transform photos of real-world scenes into cartoon style images, which is valuable and challenging in computer vision and computer graphics. Solution belongs to learning based methods, which have recently become popular to stylize images in artistic forms such as painting. However, existing methods do not produce satisfactory results for cartoonization, due to the fact that cartoon styles have unique characteristics with high level simplification and abstraction.

It proposes a cartoonGAN, generative adversarial network (GAN) framework for cartoon stylization. This method takes unpaired photos and cartoon images for training, which is easy to use. This method is also much more efficient to train than existing methods. The GAN framework decomposes the images into different representations and learns from them to generate cartoon images. This decomposition makes the framework more controllable and flexible which allows users to make changes based on the required output.