Image Inpainting using GAN

Computer Engineering Department

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(An Autonomous Institution)

Abstract

Inpainting, the technique of reconstructing lost or deteriorated parts is an ancient art. It has numerous applications from the restoration of damaged portions to removing an object from the image. The word “Inpaint” means to fill the gap in the image. In the Traditional form of Inpainting, artists used to fill the gap in pixels with pixels that are the same as, or similar to, neighboring pixels. This process was time-consuming and They fail when the image has huge gaps or a significant amount of missing data. In this project, we have used the Deep Learning-based Convolution method for digital inpainting.

Project Outline

- **Image Inpainting helps us to recover the lost portion of the old photographs or damaged images**
- **Users can also remove the unwanted objects from the Image or remove unnecessary persons from the photographs**
- **User can remove the background to make better use of Image**

Project Modules

- **Image Inpainting**
- **Background Remover**
- **Object Remover**

Project Applications

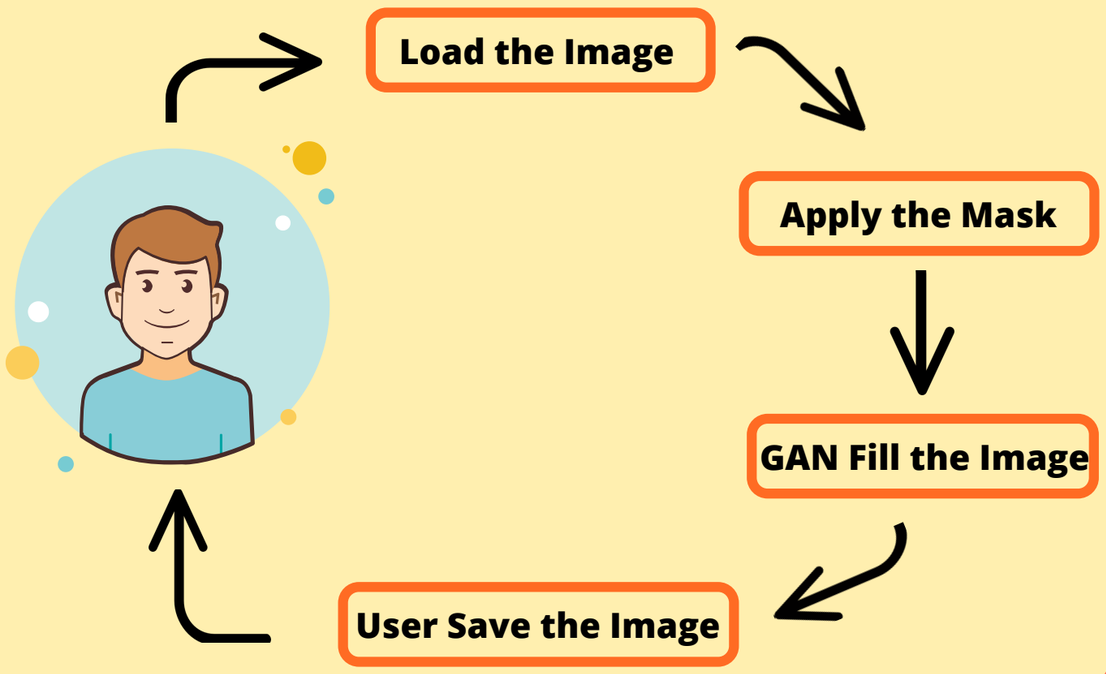
- **Restoration of old photographs**
- **Removal of background**
- **Removal of object**
- **Removal of scratches**
- **Intelligence and Security**
- **Automatic modifications of images and videos**

Technologies Used

TensorFlow

Keras

Project Flow



Results

Image Inpainting

Background Remover

Object Remover

Project Guides

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Subject Code: CP442
Subject Name: Project-II (UDP)

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