The Image Cartoonifier
SoC Report

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July 2023

Mentors

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Introduction

This project aims to develop a system capable of converting any given image into a cartoon representation. It employs the use of convolutional neural networks to train a model that gets the work done.

Resources, Things Learned and Work Done

The initial weeks' resourses contain Python documentations and material for machine learning algorithms like linear regression, classification and logistic regression. The next few weeks' span thecontents like deep learning, improving deep neural networks and convolutional neural networks. This material served a solid foundation for understanding the implementation side of the project. At last there's a paper titled "A Neural Algorithm of Artistic Style", which is implemented as this is the core objective of this project. The core idea is to take three images, one target image which may be a white noise image, second that gives the content to the target image and third that gives the style to the target image. The distance of the content of the target image from the content of the content image and the distance of the style of the target image from the style of the style image are to be minimized. I have used PyTorch to implement the project.