Denoising cyclegan

VIGAN generative model – improved

Create slides for both 10 slides each – talk about highlights and components

Pinpoint the reason why I’m doing it

<https://www.deeplearningbook.org/> - summarise last chapter 10 slides

Think of the tool tensorflow, keras, reading papers

Time estimate – how im going to do it

Email the powerpoints

Hi, Hooman hope you are well. I’ve read through the CycleGAN and VIGAN paper and thought that they were very interesting, especially the missing data problem explored in the VIGAN paper. I hadn’t read the full CycleGAN paper until now but have a better understanding of the model. I’m planning on doing more research on denoising auto encoders to hopefully implement in my model although I was only planning on using unpaired data which means it wouldn’t be quite as effective but the results from the paper showed improved accuracy regardless.

For my project I thought it would be a good idea to focus on the concept of synthetic media, which is becoming huge in recent years with technology like deep-fakes and face filters for example. Synthetic media is currently revolutionising the consumer media landscape and changing the media we consume and create. This would allow me to talk about an industry that encompasses my idea and gives my project a direction which I think was missing before.

I want to create a model that can allow companies to advertise in videos without needing to film it with their product themselves. It has a wide range of use cases, but examples include advertising on youtube, allowing content creators to agree to have a product shown in a video they’ve already filmed or uploaded, or if a company creates an advert for a certain region but would like to use the same advert for the same product that falls under a different branding. E.g. walkers – lays, milky way – mars bar. In the future, I would like to have a website where people can choose a stock video and implement their product, saving them money and time filming it themselves. A similar concept exists for face movements from the company Synthesia who used their AI video synthesis technology to replace "JustEat" with "MenuLog" by changing the lip movements in all the shots in the advertisement. Can be seen at the following link.

<https://www.synthesia.io/post/snoop-dogg>

Please let me know if you think the idea of synthetic media to encompass my idea is a suitable direction for the project. Thanks again.

Kind regards,

Chris

Idea falls under synthetic media, which is a huge growing industry.

The goal of my project is to provide a service that allows you to select a stock video and place your product into it using AI

If you need to add your product to a video you don’t need to create the same video twice, saving money – you create an advert for walkers crisps for the UK audience, and instead of re-filming the entire advert, insert the ‘Lays’ branding into the same video for the US audience. (This is the key idea)

This has been done for face movements but not the product.