**Start**

Hi!! How are you guys doing? My name is Yunting Chiu.

Today I am going to talk about **Pluralistic Image Completion (O~authers)**

**(Generative adversarial network frameworks)**

**Purpose**

* Early methods mainly focus on the similarity between the image’s background and the blank. (The old models want to see the relationship between blank and the existing pixels at the beginning).
* One image only generate one output
* There are too many methods are focusing on reconstructing the **original** image during the training

**Summary**

So in this paper, their final goal is to produce diverse pictures using image inpainting.

**Approach** (My understanding is that)

Ig: the original image

Im (the masked partial image)

Ic: complement partial image : included the original missing pixels

In order to have a distribution to sample from, the probability of taking the sample is given Im then to take Ic

**Ablation Studies**

A large number actually means the result image is close to the original image. Conversely, a small number actually means the result image is not close to the original image.

Joke: You see, the guy has red eyes, which might not be ture in the real world, unless we live in **a** Marvel Movie.

Comparing these three models, although PICNet has a lower LPIPS score, it is close to reality.

**Critiques**

**Pros:** image is natural

**Cons:** In reality, if you are given a damaged historical image that you need to recover using image inpainting . The problem of this model is that it will generate so many realistic looking pictures rather than recovering the true one (For example: education purpose).