

Monster GAN

30 HORROR FILMS TO SEE BEFORE YOU ARE OBSOLETE



Don't Die In The Cellar



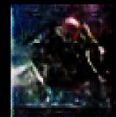
At Nightfall They Rise



Nightmare of the Giant
Dinosaur From The Tomb



50 Foot Yeti



Day of the Psycho Student



Bride of the Cyber Robot



Crocodile vs Ghouls:
Colossal Invasion



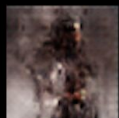
The Ghoul Must Rise



Another World Revenge



Halloween Curse



London Attack



Blood_Sucking Ape-Man
In Space



Rock Jackal



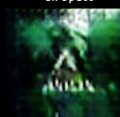
Evening of the
Horrific Cannibals



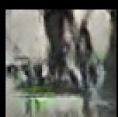
Rise of the Dreaded
Gargantuas



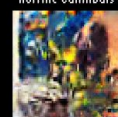
Blood Sucking Cockroach



Island of the Evil Hooker



Cyber Psycho



Centipede
in the Library



Bride of the Psycho Slayer



The Deep



Abbot and Costello
Meet Mummy



Alien Python



Amazing Slasher



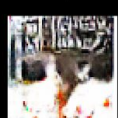
Land of the Psycho Dentist



They Destroy



Diabolical Megalodon



Razor Sleepover Curse



Satan



Fly Witch

Concept:

Science Fiction and Horror films often act as a mirror for what truly scares a culture. Not just in the literal sense, but also through themes such as fear of invasion, nuclear warfare, communism etc. In the 50s to 60s, oversized insects and animals appeared often, like in *Them!* and *The Deadly Mantis*. This reflected the fears of nuclear proliferation and the effect on the environment. I began to wonder what scifi and horror films say not contextually in those time periods, but also as an overarching history of the 20th to 21st century. If you took similar features from every scifi/horror film in the past 70 years, what would the monsters look like? What would they represent?

Technique:

I chose to use a DCGAN (Deep Convolutional Generative Adversarial Network) because I wanted to create new monsters that still had the influences and style of previous monsters. To do this, I first had to find a dataset. My problem was that there were no already compiled datasets of only horror/scifi film posters. As a solution, I went to IMDB and created my own from their data. It contains every movie poster in those genres from the 1950s to now (about 1,760 images). I then proceeded to input this into a fairly standard DCGAN. A GAN has 2 parts: a generator and a discriminator. The Generator creates fake samples that along with real samples are put into the Discriminator. The Discriminator tries to guess if this was a real image or a generated image. The Discriminator will attempt to improve the Generator's parameters until it fools the Discriminator. After running it through the GAN, I also used an online generator to add generative horror titles. I matched these with the images I thought represented them best, and arranged these into a movie poster.

Process:

I had quite a time getting this thing to work. It involved a lot of tweaking. I had to create my own dataset as this was not available (IMDB no longer has a free-for-all dataset of their images). I also had trouble getting the images to be bigger. After a while, I began to understand that the 64x64 was hardcoded into the example and although I did get it to run with 128x128, my dataset was not large enough to create coherent images. Because of this, I chose to go for a poster of posters. I had seen many online quizzes and real life posters that say the "100 best movies to see before you die" and such, and so I decided to emulate this.

Result:

This worked... surprisingly well. Although the images are low res, some people thought that this added to the spookiness. And the images actually tricked a number of people. During the exhibition, a girl was furiously typing on her phone and looking at the poster. She overheard me talking to another person, explaining my process. She looks up surprised and said she was adding some of them to a list of horror films for her and her friends to watch. She thought that all the films were real. For me, that is best case scenario. The poster managed to trick a number of people into thinking that these were real films. Although I wish I had nice large high res images, the smaller images did the job and got the point across. I'm looking forward to seeing what types of GANs will exist in the future that could take in smaller datasets and create larger images.

Reflection:

Honestly, for me, this was hard. Although I do code, I do not do coding like this. This was a challenge, but that's also why I wanted to do it. I realized (and I was right) that if I did a project alone, I would learn much more about ML. When in groups, I ended up doing things, but not understanding the code as much as I would like. I got to dig deeper into the DCGAN and actually made it work (with help). The reception to this project was much more positive than I could have guessed it would be. This project was also just fun for me. I love scifi films in particular- especially in combining them with history. I think I need to remember sometimes that my art doesn't always have to be serious, but can just be fun as well.

<https://github.com/littlebluelight/MLDoc>

www.sydney-ayers.com

//will be going up on here soon