The Generative Adversarial Networks for Animal Face generation was a successful project. I am proud of all my teammates and all that we have accomplished. I learned a lot about how GANS work. It is interesting how it uses two different networks to compete against each other which in-turn makes the generation of images more appealing to the problem space. I worked on creating two different networks that played off each other called the generator and the discriminator. The generator was a model that would generate images based off of a random vector seed (that I programmed). And the discriminator was a binary classifier that would determine whether images where real or fake. To do this I created a Convolutional Neural network. I learned about convolutional neural networks in the class CS455. This process was terrible to run on our CPUs, so when me and Luke and Vivian were programming this on our laptops, it took way too much time to compute 1% of 1 epoch. This forced me to learn how to utilize my GPU using CUDA. CUDA allowed us to (relatively) quickly compute the animal faces over 50 epochs.

My role in this project was to create the initial draft of the code and get a semi working representation of our project. Luke worked with me to debug and reformat my mistakes and add some functionality. Vivian is a god tier PowerPoint and document writer, so she did all the documentation and logistics of the project. All together we compensate for each others flaws in very helpful ways, Luke is neater at programming, I’m fast and can apply functionality very quickly, and Vivian is the only one on our team who can read and write in English.