Most of the work I performed on the project was physical work. Initially the plan for my work was split between making a database for our software to store safe faces and building the turret. When someone else was working on the facial recognition we discovered that the database I was going to create was unnecessary because the python library we used had one built into it for the safe faces. The idea of the physical turret was to have a box that the gun sat in that used a servo to turn on another box and wire the gun to an Arduino to send it signals to shoot. After we determined we couldn't wire the Arduino directly to the gun we decided to make a trigger pulling system with a servo and twine that we turn to pull the trigger. In order to create the boxes I used power tools to cut the wood to size and make the boxes.

I became more confident with power tools. I can't say I learned too much programming wise since my software part of the project got canned. Only two of us ended up having software parts to the project. I'm not the happiest about it because I feel like I did nothing to get it functional. All I did was physical work. I wish I would have done more programming work. That was definitely an obstacle, more so a mental one though. I needed to so some processing to be okay with not doing any programming. I have had interviews ask about my part in the project and I don't have much to tell since I didn't write any code. There were many physical challenges though that all center around making the box the correct size and modifying the gun to fit and stuff. There were several meetings we had that I needed to re-think the box, the friction when it turned, and other physical problems. It took at a lot of mental power and trial and error to get it pretty much right. There are still improvements that could be made to make it more functional.

As a group we were able to make functional nerf turret based off of facial detection and recognition depending on what model we used. We had both prepared and working. We accomplished some team work to get it done. I think when we had parts to work on together we worked on that well, but I think communication is where we lacked. We were all more or less a little easy going and procrastinating prone, so it made it hard sometimes to get things done in good time.

I think we had a comparable amount of work. I think Austen worked the hardest though. The amount of work that he had to put in to get the facial recognition to work and have a good framework and functional in a real-world scenario. Technically it was functional way before our final product, but to make it more efficient it took a substantial amount of work. However we each had our own substantial work to get it working properly. Most of my efforts as previously stated were on the physical side of things, but we all did a good amount of work to get it working properly. I think Austen deserves some special recognition. Our project wouldn't have been possible without him and the class he took on Machine Learning. He was able to use that knowledge to get opencv working for us to use for our project.