## ShenaniGANs - Daniel Hackney, Tim Neale

## **Computing Resources**

With how computationally complex neural networks are, our group is not sure whether the computers currently available to us will be able to handle our project. Our goal to train two neural networks as part of our GAN will push common computers to their limits, and though we aren't sure if it will be a problem yet, we predict that it will be. We will have to research possible solutions, including asking for permission to use larger university computers or remote supercomputers. This constraint may lower our possible outcomes and deliverables depending on what resources we can attain. The threshold of acceptability may need to be lowered to accommodate the lack of resources in this area.

## Technical Knowledge

Given that our experience with neural networks, machine learning, and GANs themselves is extremely limited as of the start of this project, the proficiency of our work may be adversely affected. A significant amount of time will need to be dedicated towards increasing our theoretical understanding of GANs as well as the practical usage of the software platforms used to develop and train them (such as TensorFlow). Depending on the programming language we choose to use, as well as the appropriate software libraries needed for our project, additional time constraints will arise in order to gain a baseline understanding of how to use them effectively.

## **Project Scope**

With our lack of technical knowledge in the area, as well as the lack of foresight regarding potential roadblocks, we are not sure how expansive the scope of our project can be. With how varied the individual components to our project are, our group members may need to spend a longer amount of time researching and tweaking them to work properly. To ensure our group does not overstate a realistic scope, we will most likely be considering an underestimated scope at the beginning of our project. Once further research and development has been done, the scope may be modified to reflect how the final deliverables of the project could look like.