

Self Reflection Essay

I started this thesis after failing my previous one. I approached it with high hopes, determined to succeed and do well. I made sure to attend the sessions whenever I could. However, towards the end, my attendance started to dwindle due to unforeseen circumstances, causing me to fall behind slightly. Nevertheless, I believe I managed to catch up in time and made up for the lost progress.

In terms of the thesis topic, I was drawn to this field because I have always been fascinated by the brain. Early on, I decided to pursue a neuroscience-related AI project, as it combined my interests. While I was passionate about the subject, I recognized that it was not my strongest area. However, I made the most of the opportunity to study something I truly cared about, and I believe I emerged stronger as a result. Throughout this process, I have become more self-disciplined and discovered intrinsic motivation to work diligently on this thesis.

One of the significant challenges I faced was selecting a dataset. Initially, I thought I had found the perfect one. I discovered the dataset on Kaggle, where it was described as focusing on Alzheimer's disease and its progression through life, using amyloid PET imaging, relatively rare resource. I worked with this dataset up until after the poster presentation. However, after preprocessing the images, I discovered that there were very few positive Alzheimer's cases in the dataset, which made classification difficult. Upon further investigation, I learned that the original focus of the dataset had changed, and the description I had read on Kaggle was outdated. From this experience, I learned the importance of thoroughly verifying dataset labels right at the start. This lesson proved invaluable when I eventually selected the dataset I used for my research.

The coding portion of the project was both enjoyable and challenging. I had the opportunity to use the GPU4EDUCATION infrastructure provided by the university for the first time. While it was exciting, it was also stressful. On several occasions, I trained my model for more than 24 hours only to discover a bug that prevented me from obtaining any results. One limitation of the platform was the inability to view real-time outputs, which forced me to adapt by working with small subsets of the data until the model was highly optimized and ready for use on the full dataset.

The writing process was also challenging but ultimately rewarding. It was satisfying to see the results of my hard work come together towards the end. In the future, I plan to make better use of feedback opportunities, which I was unable to do this time around. However, I greatly appreciated the feedback I received from my first submission, as it was extremely clear and practical.

Overall, this thesis has been a rewarding process and an enjoyable project. I am happy with the topic I chose because it pushed me out of my comfort zone. I feel that I have grown from this experience, not only as a writer and coder but ultimately as a researcher.