

Individual contribution – Tim Roderick

In the following, I will describe my specific individual contribution to the Applied Data Science coursework. I will list my contributions in the order of completion to demonstrate the work done over time.

Initially, I was responsible for a small amount of research into the topics being explored by the group. I accumulated some specific references geared towards how we may evaluate the potential modelling we would soon do. After this, the group took on much of the work of exploring and understanding the data provided to us.

After we had more of an idea of what we had available to us, I was tasked with generating most of the experiments we would perform and writing the code we would use to model the data we pre-processed. I curated a large set of models I felt applicable to the problem at hand to perform comparative experiments on our data. I implemented this in Python and used it to generate results on our data for depression classification for all models. With this we were able to compare the features selected and the individual models for the purpose of modelling depression diagnosis.

With these results, I took responsibility for writing the modelling section and results section of our report. This involved more extensive analysis and research that I feel further improved my understanding of the modelling aspect of the data science process. After this, I helped write small parts of other sections to improve clarity and focus.

In summary, I was responsible for the large part of all modelling and experimentation for this project. I designed two experiments and wrote the necessary Python code to generate results. I then summarised these efforts in the report and assisted others. I have learnt in greater depth the most efficient and rigorous ways to tackle a data science problem and have gained understanding in the more technical aspects of how we interpret the data provided.