Summative Assignment Artificial Intelligence COMP2261 – Machine Learning 2020/2021

Matthew Chapman February 19, 2021

1 Problem framing (10%)

The problem I plan to solve is of predicting the number of Covid-19 cases in the future, which can be tomorrow or next week.

The motivation is to create machine learning models trained on real data aid the analysis of the pandemic and inform public health decision making.

2 Experimental procedure (35%)

- Clean the dataset.
- Split the dataset into training and test sets.
- Train a logistic regression model.
- Train a polynomial regression model.
- Train a normal regression model.

3 Results (25%)

- Make comparisons between the 3 predictive models
- Provide necessary tables and charts to summarise and support the comparisons.

- 4 Discussions (20%)
- 4.1 Chosen models
- 4.2 Experimental procedure
- 4.3 Limitations
- 5 Conclusions and lessons learnt (10%)
 - \bullet Discuss the results and draw conclusions from your experimentation