

Appendix 2 - Machine Learning Task

First and foremost, we felt that since we haven't gotten a walkthrough of the code makes it automatically harder, it creates a gap between our understanding of the program and what the code actually executes.

Machine learning is a generally complicated concept, and without the basic knowledge of machine learning code, it's harder to understand. The fact that it's random lines makes it harder to predict what is going to happen and see how our changes are even making a difference in the system. We also do not understand what the various variables like "epochs" do, and do not understand how a change in the 'low' and 'accuracy' variables in the model makes a change in machine learning. We have tried changing the values of Dense from 512 to any other value to see if it makes a difference, but we were not sure if that was the case since all the lines are random. The program also crashed after a few prompts without an understandable error message, and we were not sure if that was a problem from our side or from the program.

For next time, it would have helped us to get a more described task, and more explanation of what is happening in the code, because it's harder to understand someone else's code.

From what we have understood based on the lectures, the program is supposed to analyse the input data and create categories. These will serve as neurons in the matrix, and each movie line will be connected by the actor who is assigned these lines. Based on this matrix, an array of [1,0] combinations are created to see which words are similar in each movie line for each actor. The model creates a neural network with the density of 512 for 30 classes (which are the categories). This is the machine learning part of the system. In theory, changing around the values of what is presented in this portion of the logic should impact the result of how the program learns to give appropriate random lines from the same actor.