

Capstone Project for Computer Science Sc.B. – Expected to Graduate Spring 2023 – Jason Singer

Class: CSCI1420: Machine Learning (Professor Stephen Bach)

Project proposal has been approved by professor

Title: Distinguishing Plato from Aristotle

Abstract:

The two towering figures of Ancient Greek Philosophy are Plato and Aristotle, and they are often thought of as quite similar by people who have not read their texts. The truth is that the two thinkers differ greatly both in the content of the philosophical thought but also in form of the primary texts which have survived to this day. Plato's surviving works are dialogues written in continuous ancient Greek prose and are widely regarded as the best quality ancient Greek prose that survives. Aristotle's, on the other hand, are his lecture notes and these are often very dense, sometimes incomplete, and filled with detailed, awkward, notes about where we are in some philosophical argument. This Capstone project investigates whether we can teach a machine to distinguish the writings of these two authors, as most human philosophers would do with ease. Specifically, supervised learning Artificial Neural Network algorithm will be trained on input text from each of Plato and Aristotle (length of twenty words) and designed to classify which author they were written by.