**Digital Aristotle**: *Problem Statement*, *Methods*, and *Results*

The Digital Aristotle is being constituted with the desired goal of bringing greater and more achievable education to scholars who face hardships with a certain subject. This goal is essential due to the complex nature of material, especially in mathematics, which causes great confusion for the student. The way subject material is taught in a traditional classroom is set to be directed linearly and within a specific time range, therefore subject material is either taught too fast or too slow for the students. There are also not enough teachers in comparison to every student to be able to effectively give personal and individualized recognition towards the scholar’s complications. Further, the Digital Aristotle is created to be used gratis as to allow more scholars to gain access to the information without the high costs of an anthropological tutor. Lastly, the Digital Aristotle is created to aid students who struggle in their studies and seek to find greater knowledge.

The user control of the Digital Aristotle begins on a webpage where the user has the ability to input a string of characters; this input is then sent by the server to an allocated Python program. The Python program allots the text to numerous functions which mainly use the Levenshtein distance, a method used for measuring the differences between two strings, and compares the text to chapters, sub-chapters, and text held within the JSON database. The database is created by “searching” through a PDF of a mathematics book and using the disparity in font between sections in the book to construct a codified database in which a more accurate result will be produced based upon the user’s input. After the chapter which most relates to the input string is found, the chapter’s pages are displayed for the user on the webpage.

The Digital Aristotle, being a four-year project, is far from its culmination, but the first year or stage of the project has been completed. In this stage, a database containing mathematics has been forged and culled in a matter which allows it to be easily and expeditiously searched. A functional server and webpage have also been created which makes the program more accommodating, so the first-year of the project operable and its creation is steady as intended.