Manuscripts are important because they provide information about ancient times. Historians use manuscripts to understand ancient peoples and what they believed was worthy of being recorded. Even the manner in which a manuscript is written can tell scholars about a culture. Paleography is the study of handwriting for the purpose of dating manuscripts. Dating back to the 17th century, paleography was originally done using only the eyes, but modern technology has facilitated new paleographical research methods. My project has its roots in a new technology developed by Mount Holyoke Professor Michael Penn and Smith College Professor Nicholas Howe that uses digital handwriting analysis tools to compare the hands of different manuscripts with the result of matching the script styles of undated manuscripts with dated manuscripts.

My project tests this software with Syriac manuscripts. Syriac is a form of the ancient language of Aramaic. I used a database of 200 digitized, securely dated Syriac manuscripts ranging from the 5th to the 11th century. These manuscripts were collected from libraries across the globe for the purposes of this project. In traditional Syriac paleographical scholarship, there exists a binary system of categorizing script types: Estrangela and Serto. These two scripts have been known as the only two that exist in the Syriac written language. Estrangela is defined as an angular script which existed from the 5th century onwards, while Serto is its cursive form, which was developed in the 8th century. For the purposes of this project, I call this system of dividing Syriac into two hands the “standard model.”

Using my sizable manuscript database, I challenge the standard model by using securely dated manuscripts to illustrate its flaws. There are a large number of manuscripts that do not fall within the binary system. I also propose a new paleographical schema for Syriac manuscripts: The Bush Model. My new model has more specific script categories that apply to a smaller date range, therefore, scholars will now be able to date manuscripts more accurately than ever before.

While my project is only a case example in a particular linguistic tradition, the larger goal of this project is to serve as a model for other language groups that wish to use this software. This project demonstrates a tangible payoff that can come from digital humanities research projects.