

**Facial Recognition in Images:**  
**Facial Segmentation, Feature Extraction, and Classification**

Noah Hester and Christian Mason and Samson Seligman

COMP/MATH/PHYS 445: Image Analysis and Pattern Recognition

Dr. William Barber

April 16, 2025

## **Abstract**

The goal of this project is to further develop our facial segmentation system to create a more robust pipeline in order to segment an image, extract facial features, and then perform classification of images using those features. This portion of the project will focus on the feature extraction and classification systems used within the project, comparing different classifiers and their effectiveness at the task. We will use images, most likely in large quantities (but at least 6-8), of our faces in order to train these classifiers, as well as more images for testing and comparing results.