

Graphic User Interface Machine Learning Algorithm

A. Introduction/Background

With inspiration to connect statistics and programming classes, this project creates Graphic User Interface for a machine learning algorithm that lets users upload a dataset and builds a simple classifier for them to clarify new images.

B. Objectives

To explore and visualize the math that goes on behind the scenes when a machine learning algorithm is executed.

C. Scope of Work

This project consists of both an intense amount of front and back end. To allow users to visualize the graph and input their chosen images, we used C++ with SFML (Simple and Fast Multimedia Library). Combining the image into an average image and calculating the potential error to the machine learning model has been done with Matlab and C++.

Austin J. mainly worked on the front end, while Jungjae L. mainly worked on the back end.