

Final Project Proposal

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Proposal: Rice Classification

My idea for this project is to identify different types of rice grains by a given image. I eat rice almost every day and I once bought a wild rice blend to cook. A wild rice blend is a mix of many types of rice. I remember looking at it and trying to tell each grain apart, but that failed due to my lack of rice knowledge. When I stumbled across a rice image dataset, I knew rice would make the perfect project.

Rice classification is a powerful skill and having an algorithm that can classify different rice grain is useful for rice merchants and farmers who plant rice. Quality of rice is something that is taken all around the work. The length of the grain, the width, and also the color take into account for quality. Also, I think having a system that identifies rice grain is super cool.

This project will be written in Python using Colab. I will use two classification algorithms on the dataset, K-Nearest Neighbor and Naive Bayes algorithm. I will also compare the run time of both algorithms to see which is more effective. The dataset will have a train-test split of 80% train and 20% test.