HAAG Weekly Report Week 12

Mercedes Quintana

Time-Log

What did you do this week?

- Connected front and backend
- Updated website
- Added the image contrasting to the pipeline

What are you going to do next week

- Keep website updated
- Fix an issue where if you move a point twice it relocates to a random spot
- Fix so you can download updated tps and annotated image

Blockers, things you want to flag, problems, etc.

- None

Abstracts:

Link: https://dl.acm.org/doi/10.1145/3696271.3696274

Customer Clusterization using Machine Learning Approach

Understanding customer is crucial for marketing strategies and increasing customer satisfaction in today's business environment. One method to fulfill of marketing strategies is segment customer based on their purchasing habits and demographic characteristics. This study describes a complete approach to customer segmentation based on K-means clustering, an unsupervised machine learning algorithm. There are three stages namely preprocessing to select feature and variable is used to develop clustering model, clustering model implementation, and validation of model. There are four clusters that compare the relationship of marital status and recency to the grocery purchases (product) made by each customer to find out which ingredients we will use to make better products for customers.

Summary: This paper introduces KNN clustering analysis and uses it to find out which grocery products best suit customer needs based on the Kaggle Customer Segmentation for Clustering dataset.

What did you do and prove it

This week I, with Ayush's help, was able to fix the connection to the backend. I was also able to get the image contrast section of the pipeline. All that is left before we can have others try it is the ability to download the tps and annotated images, which is exciting! I plan to have that ready for the bi-weekly meeting. On a more logistic side, we need to find a server to host the program. I emailed a senior IT guy, that I found on GeorgiaTech's website, about this on Friday, but did not hear back yet. I will try again to get a response. Below is a picture of the working software that is connected to the backend.

Upload an Image

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