Women Who Code

Mission: Predictable - A Virtual Machine Learning Hackathon

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https://github.com/spettiett/WWC-Battle-COVID19

Our Project

Our project made it to the Hackathon Finals as one of the Top 7, of over 60 submissions received by the Women Who Code and Amazon Web Services. Awarded $5000 amazon credits to continue building ML projects.

COVID-19 is a global crisis impacting millions of people world-wide. Specifically, in the US, the disparities between the size of the black population and the percentage of black people infected with, hospitalized with, or dead from COVID-19 appear to be the most severe.

To battle this inequality our team chose to build an unsupervised machine learning model using **AWS Sagemaker pre-built algorithms**, such as: **K-means clustering** to perform population segmentation and dimensionality reduction techniques like **PCA** to evaluate a large number of features. These features include US Census Data, US COVID-19 cases, deaths, and policies to help us discover new trends and patterns in solving this crisis impacting the black communities in the US.
The data and our analysis reveals a link that's hard to ignore between **race, poverty, cases and deaths** in America.
Our analysis demonstrates the features that are impacted:

by Government Policies

- *Relaxing stay at home measures*
- *Initiating early business re-opening*
- *Obtaining health insurance*
- *Obtaining paid sick leave*

by Socioeconomic Issues

- *Living under Federal Poverty Line*
- *Unemployment*
- *Access to Internet*

These factors indicate an infrastructure issue in America and the need for having a **National policy** on **Health Care** and **Income Inequalities**.

The Team

Our team is represented by Omega Markos and Sharonda Warner.   We first joined forces as part of a cohort with Flatiron's School attending their Data Science program that gives students the breadth and depth needed to become well-rounded data scientists and *"level-up"* our careers. Then, with the excitement around Women Who Code | Mission: Predictable - A Virtual Machine Learning Hackathon when joined forces, again to learn **AWS Sagemaker**, *together,* to build our machine learning model to help Battle Covid-19.

What we wanted to accomplish in this Hackathon was to uncover more insights into the *... Why?..* And find out, if *... Disasters do Discriminate.*

About Us

Sharonda Warner

Data Scientist and Business Intelligence professional with a passion for finding meaningful insights through statistical tools and analytics. With a background in data science, technical consulting, and computer science, I have worked for several Fortune 500 companies to help improve employee and customer engagements, by developing CRM applications and BI platforms. I am equally excited about sharing my career journey with young girls inspiring them to get into technology *... "Each one teach one..."* has been my guiding light for continued excellence in all that I do.

Omega Markos

Data Scientist with a strong background in statistics and experience in data mining, statistical analysis, and machine learning. I bring strong analytical skills to tech projects with the compelling desire to build projects that create an impact in society.