

Kyle Hays

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[Github Projects](#)

Education

California State University at Monterey Bay

B.S. in Computer Science - Data Science • Graduated: Fall 2019

Projects

Stock Trade Analytics Dashboard

Angular / Flask / Python / MongoDB • Fall 2019

- Lead a team of 5 to develop an interactive web-based UI to monitor Alpaca-Trading algorithm activity.
- Established a NoSQL user database utilizing Spring Boot and MongoDB.
- Utilized python and Flask to integrate Alpaca into an efficient microservice rest API.
- Delivered Product allows Users to execute and monitor trades live on the stock market.
- Allowed users to take live decisive action on trending stocks to increase portfolio value and minimize risk.

Soccer Match Outcome Prediction

Python / JavaScript / PHP / HTML • Spring 2019

- Lead a team of 5 to develop a website to host soccer statistic information as well as perform match outcome predictions using relevant Machine Learning models.
- Allowed users to make informed bet's on top trending teams to maximize sports betting profits.
- Created an SQL user database using MiraDB and PHP.
- Formulated a model to predict match outcome utilizing KNN, Decision Trees, and Naive Bayes.
- Utilized Google Cloud combined with a Flask for a backend hosting the prediction model as an API.
- Demonstrated the ability to adapt to unfamiliar circumstances to produce a viable project under time constraints.

Polr

React / Java • Hackathon 2018

- Constructed an app that brings modern convenience to our democratic process by providing multiple avenues for seamlessly finding any polling information you need.
- Empowered users to vote by providing them information in a concise manner.
- Collaboratively produced a web app using an Angular frontend and Java/Spring Boot backend.
- Integrated SMS functionality using Twilio's messaging platform.
- Successfully deployed application utilizing Heroku and git-lab.

Tensorflow - RNN

Python / TensorFlow • Fall 2018

- Developed an RNN to perform text prediction based off of an Alice in Wonderland text training set.
- Utilized Pandas and Scikit-Learn to perform preprocessing of the data.
- Generated a parameter optimization search to find the best model in TensorFlow.
- Produced a working model that takes sentence input and autocompletes text.

Credit Card Default Prediction

Python / Scikit-Learn • Fall 2018

- Constructed a model to correctly predict if a credit card customer will default on a payment.
- Utilized Scikit-Learn to generate and test machine learning models.
- Performed a Grid Search of models and parameters to maximize true positive predictions.
- Developed a pipeline with Pandas and Scikit-Learn to make preprocessing/deployment easy.

Experience

Teacher Assistant

UC Berkeley Extension - Python • April 2020 - Current Employer

- Assisted the professor in guiding students learning for the UC Berkeley Data Analytics Boot Camp.
- Guided Students in developing and deploying python programs for statistical analysis/visualization
- Introduced Students to advanced topics such as big data analytics with Hadoop and machine learning
- Assisted students in applying big data analysis with machine learning and Advanced Neural Networks
- Helped students develop skills with tools such as D3.js, Matplotlib, tableau, Hadoop, NumPy, Pandas, MySQL, MongoDB, ETL, Leaflet.js, and Excel

Call Center Analytics Dashboard

Capital Insurance Group - PowerBI / R • Fall 2019

- Developed a call center dashboard for Capital Insurance Group utilizing Microsoft's PowerBI to minimize action and response time on customer calls.
- Engaged with the customer to understand metrics needed in their call center.
- Integrated data from Jira into Microsoft power-bi through an SQL call to a Jira API endpoint.
- Generated Live call center metrics: issue tracking, average handle time, and key issue influencer to increase call center effectiveness.
- Identified trends and key influencers to solve top trending call center issues.
- Provided tool for leadership team to ensure consistent quality of performance.

Teacher Assistant

California State University - Python • Fall 2019

- Assisted the professor in guiding students learning for the course Intro to Data Science.
- Guided Students in developing and deploying advanced Machine Learning models.
- Introduced Students to industry standard Machine Learning methods and design practices.
- Engaged one-on-one with students struggling in the course.
- Worked under the teacher's direction to assist students in achieving the learning outcomes.

Data Analyst

Community Bridges - Python • Spring 2019

- Ingested Data from the government county reporting system into a data lake for analysis.
- Utilized regex to parse and obtain client specified data from data lake.
- Provided a detailed report on funding, demographic, and services rendered.
- Generated a detailed notebook utilizing Jupyter Notebooks and Matplotlib for graphics.
- Created metrics for Customer to obtain government grants for non-profit organizations
- Generated insights into services rendered to verify funding matched service output.

Skills

Fluent: Python, Java, Angular, React, HTML/CSS, JavaScript, SQL, NoSQL

Familiar: PHP, C/C++, Typescript, R, Bash, AWK, UNIX

Tools: Git, GitHub, Spring Boot, Heroku, Shiny, MongoDB, Jira, D3.js, Hadoop
Scikit-Learn, TensorFlow, Jupyter Notebook, Google Cloud, Android Studio, Excel