ALEXIS CASAS

EDUCATION

University of San Francisco, CA

August 2016 - Graduation May 2020

BS in Physics

Overall GPA: 3.51

Minors in Business Analytics & Physics Engineering

Honors: Sigma Pi Sigma Member, Clare Boothe Luce Scholar, Women in Physics Communications Chair

CAREER OBJECTIVE

Hardworking and dependable individual, with a profound understanding of mathematics and genuine passion to learn. Currently seeking to apply problem solving and analytical abilities to improve systems of operations.

PROJECTS

Coffee and Tea production across the US

Created and presented Tableau dashboards identifying key areas for business improvement. Some story-telling visualizations include: Pareto Graphs, Waterfall Charts, and Animated Time Series.

Advertisement Interaction

Utilized K-NN, SVM, and Logistic Regression to predict the likeliness an individual would interact with an ad and achieved up to 97.6% accuracy. Also used variable ranking to determine useful variables.

App Popularity: Google vs Apple Market

Analyzed and cleansed large data sets in Python and made projections on which app profiles could be profitable.

Restaurant Reviews

Used Sentiment Analysis, specifically bag-of-words, to create a word cloud of common phrases left for reviews, and predicted the probability of receiving a recommendation from each user.

Improving Bzzt Podtaxi Operations

Organized, cleansed, and merged large data sets in R. Then, applied K-Means Clustering to identify different boroughs within Stockholm, Sweden and determine optimal Podtaxi starting points.

SKILLS

Programming: R, SQL, Python, Numpy, Scipy, Pandas, Jupyter Notebook, Microsoft Excel Technical: Problem Solving, Data Visualization, Ad Hoc Analysis, Machine Learning,

Regression, Classification, Data Cleansing, Web Scraping, Time Series

Relevant Courses: Quantitative Business Analysis, Data Visualization, Business Statistics

Advanced Business Analytics, Analytical Mechanics, Computational Physics

Certificates: SQL Fundamentals , APIs and Webscraping, Python for Data Science: Intermediate

RELEVANT EXPERIENCE

Business Analytics Department, University of San Francisco

January 2020- Present

Teaching Assistant: Advanced Business Analytics in R

- · Guest lectured on using Google APIs as a data visualization technique for K-Means Clustering.
- · Improved students' understanding in machine learning algorithms while enhancing their critical thinking techniques.
- · Thoughtfully crafted homework solutions, carefully graded student work and provided constructive critical feedback.

Business Analytics Department, University of San Francisco

August 2019- Present

Research Assistant

- · Read and organized public transit data into data frames and worked with Google APIs to generate transit models in Python and R.
- · Read a variety of machine learning papers and communicated key points in an understandable manner.
- · Designed visually appealing business Power Points for academic lectures.
- · Assisted in drafting papers for publication via LaTeX.

Physics and Astronomy Department, University of San Francisco

January 2019- March 2020

- Physics and Math Tutor
- · Conducted weekly tutoring sessions for Methods of Mathematical Physics and Introduction to Physics.
- · Transformed students' understanding of material by developing and enhancing their analytical techniques.
- · Analyzed and reviewed department lecture material, homework solutions and exams before released to students.