

EDUCATION

U.C. Santa Cruz

B.S. Physics 2012

Highest Honors in the Physics Major

Rabbinical College of America

B.A. Religious Studies 2016

Springboard: Data Science Bootcamp

Data Science Graduate 2018

SUMMARY

A data scientist with a background in math and science who enjoys exploring the power of machine learning to build classifiers with Random Forest and Naive Bayes models. Created a prediction algorithm using Logistic Regression and Knn. Worked on customer segmentation and personalization projects. Contributed to a topic modeling system for analyzing customer interest utilizing Gensim. I am excited to join a forward-thinking company and data science team where I can use my experience and passion to bring actionable results.

SKILLS

PROGRAMMING: Python, Pandas, SQL, Scikit-Learn, C, Numpy, Scipy, matplotlib, Gensim

MACHINE LEARNING: Regression, Classification, Clustering

SOFTWARE: Jupyter Notebook, Aqua Data Studio, Github, Excel, Powerpoint

STATISTICAL MODELS: Hypothesis Testing, T-tests, Chi-Squared Test, Linear Regression

PROJECTS

TOXIC COMMENT ANALYSIS

Feb 2018 to May 2018

Used Natural Language Processing to analyse over 150K Wikipedia talk page comments to build a toxic comment classifier using a Multinomial Naive Bayes and a Random Forest models. After training with a cross-validated grid search through a machine learning pipeline the model had a AUC of 0.96 and a F1-Score of 0.73, after applying a custom threshold.

DOCTOR APPOINTMENT NO-SHOW PREDICTION

Nov 2017 to Feb 2018

An analysis of why patients miss their doctor appointments and models using Random Forest, Logistic Regression and KNN classifiers to predict patient no-show. The data-set was over 110k appointment and patient records from Vitoria, Brazil. Our top predicting algorithm was the Random Forest Classifier which after re-balancing the data and applying a threshold had an AUC of 0.72 and F1-Score of 0.44. Our top predicting variables were the time between the appointment scheduling call and the appointment and which neighborhood the appointment was scheduled in.

EMPLOYMENT

B&H PHOTO VIDEO

Marketing Data Analyst

New York, N.Y.
Sep 2017 to Current

- Built custom LDA topic model for customer interest micro-segmentation using Python, Pandas and Gensim
- Worked on analyzing customer journeys to improve marketing strategies using Python and Pandas
- Created custom customer history data-sets for the marketing analytics team using SQL to query the B&H Data Warehouse
- Created unique micro-clusters of customers from purchase histories using K-modes, K-Means and utilizing Azure ML
- Collaborated with UX and the email Marketing teams to implement new personalization trends found by the Marketing Data Team

Customer Service Representative / Trainer

New York, N.Y.
May 2016 to Aug 2017

- Provided quality solutions to a variety of complex customer issues using B&H modified Sales Force and Unix
- Worked collaboratively with many different departments including, Buyer, Sales, Verification, and Shipping to provide excellent service
- Promoted to trainer in March 2017: Taught new agents to use multiple B&H modified platforms

CROCKER NUCLEAR LAB - UC DAVIS

Student Assistant II

Davis, CA
Summer 2007

- Analyzed data from air quality samples to determine quantity of pollutants using Java built proprietary analytics software
- Assisted lead Physicist in the operation of the cyclotron particle accelerator during experiments