### Skills

Python
Pandas Numpy Psycopg2 Matplotlib Scikit-learn StatsModels REST-APIs Jupyter PyTest

SQL
PostgreSQL Redshift MySQL Oracle-PL/SQL Google Big Query ETL (Extract-Transform-Load)

Machine Learning Data Visualization ggplot2 dplyr prophet plotly caret partykit survival

Other
Git Unix Shell Cron AWS SAS SPSS Matlab HTML/CSS Javascript Tableau/Dashboard

# **Experience**

## Data Scientist | Republic Wireless

Jan 2019 - Jun 2019

- Developed a cloud-based application on AWS using mobile event data to identify and proactively contact users with non-optimal experiences. Reduced churn for ~60% of affected users
- Automated the ad creation, analysis, and budgeting process of paid media marketing to test and refine advertising with Facebook and Google marketing APIs. Increased KPI's by an average of 3x
- Built a graphical multi-armed bandit test dashboard to quickly rank ad performance across hundreds of ads
- Saved more than \$15k/month in wasted marketing spend, increased sales, and reduced churn

## Senior Data Analyst | Republic Wireless

Oct 2017 - Jan 2019

- ETL'd US Census and Voter File data into an AWS Redshift database to build demographic cluster profiles of our customer base in R (partykit, caret, choroplethr) to influence marketing audiences and ad messaging
- Forecasted customer churn rates and survival curves in R (prophet) using various regressors/seasonality to quickly determine the impact and cost-effectiveness of promotional pricing and marketing channel differences
- Created a linear-optimization solver to optimize the shipping schedule of a major product launch. Balanced expected load between support and supply while keeping shipping arrival dates to a minimum
- Maintained two analytics blogs where findings were summarized and distributed company-wide

# Research Analyst | Pasadena City College

Oct 2015 - Sep 2017

- Designed a predictive model using CHAID decision trees and K-means clustering to forecast enrollment and consequently predicted future revenue within a 1% MOE
- Developed surveys for up to 30,000 participants at once
- Conducted an award-winning cost-effectiveness study using propensity score matching that has influenced first-year college curriculum design nationwide

## Credit Analyst | 20th Century Fox

May 2015 - Aug 2015

Wrote shell scripts to automate data processing and increased overall dept. speed by 30%

#### **Education**

M.S., Analytics (Expected 2020)

Georgia Institute of Technology

#### **B.S., Financial Mathematics and Statistics**

University of California, Santa Barbara

Regression Analysis, Significance Testing, Stochastic Processes, Numerical Analysis