

## EDUCATION

### Washington University in St. Louis

Bachelor of Arts Psychological & Brain Sciences 2016

Dean's List Recipient

### General Assembly

Certification Data Analytics 2017

Professional Development Program

## SKILLS

**CODING LANGUAGES:** Python3, SQL, JavaScript, HTML

**ANALYSIS & MODELING:** Scikit-Learn, Imbalanced-Learn, NLTK, Gensim, Pandas, Numpy, Regex, Nosetests

**DATABASE MANAGEMENT:** AWS, MongoDB, PostgreSQL, pgAdmin

**DATA VISUALIZATION:** Tableau, D3.js, Matplotlib, Plotly, Seaborn, Flask, Microsoft Excel

**WEB SCRAPING:** Scrapy, Selenium, BeautifulSoup

**STATS & MACHINE LEARNING:** Cross-Validation, Dimensionality Reduction, Linear Modeling, Ensemble Methods, Unsupervised Clustering, Bayesian Inference, Natural Language Processing, Topic Modeling, Recommender Systems, Network Analysis

## EXPERIENCE

### METIS

Data Scientist

Chicago, IL  
July 2018 to Dec. 2018

- Metis is an ACCET-accredited immersive data science bootcamp with a project-based curriculum.
- Advanced training in Python, statistics, database management, and both supervised and unsupervised machine learning.
- Designed and executed five projects that required data collection, analysis, modeling, visualization, and presentation.

### HIGHEREDUCATION.COM

Marketing Analyst

Seattle, WA  
Feb. 2017 to Feb. 2018

- Used PostgreSQL to build target segments for 10 email marketing campaigns per week.
- Wrote macro functions to automate the marketing workflow, increasing efficiency by 100%.
- Delivered monthly quantitative reports to assess progress of email marketing campaigns.
- Conducted audience research to promote web page content through email marketing campaigns.

### SR EDUCATION GROUP

Web Content Contractor

Kirkland, WA  
Dec. 2016 to Feb. 2017

- Assisted the marketing team by sorting through 650 prospects and identifying target audiences.
- Conducted backlink research to choose new prospects for future marketing campaigns.
- Optimized the search algorithm of JobComet.com by researching and mapping keywords to 275 job categories.
- Updated HTML structure to ensure strong SEO signals, fixed broken links and checked for proper tagging.

### COLUMBIA CITY THEATER

Data and Marketing Intern

Seattle, WA  
Aug. 2016 to Dec. 2016

- Led 50 ad campaigns that were optimized through A/B testing.
- Recommended website changes to improve visibility and accessibility.
- Began a weekly promotion that doubled rate of impressions and increased growth rate by 350%.

## PROJECTS

### LINEAR MODELING

- Performed web scraping with Scrapy to collect merchandising and molecular data on prescription drugs.
- Predicted United States consumer drug prices with Scikit-Learn using multiple linear regression.
- Used results to determine most impactful variables on prescription drug prices.

### BINARY CLASSIFICATION

- 93% of all guilty sentences in Cook County, IL are the result of a guilty plea.
- Predicted conviction type for guilty defendants with Scikit-Learn using logistic regression and CART models.
- Implemented upsampling methods from Imbalanced-Learn to account for an unbalanced dependent variable.

### NATURAL LANGUAGE PROCESSING

- Performed topic modeling on "Les Propheties" by Nostradamus and visualized topic distributions in Tableau.
- Extracted three primary topics from "Les Propheties" with Scikit-Learn's truncated SVD method.
- Enabled 2-D visualizations using Scikit-Learn's PCA method by reducing topic distributions into two principal components.

### PYTHON AND JAVASCRIPT OBJECT ORIENTED PROGRAMMING

- Built the board game "Mastermind" into two interactive computer games.
- Version 1 written in Python for the command line using object-oriented programming.
- Version 2 written in Javascript with D3.js and published on my website.
- Used Nosetests for unit testing in Version 1 to validate the expected outputs of class methods.