ANDREW J. ZHOU

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EDUCATION

UNIVERSITY OF WASHINGTON | Seattle, WA

March 2022

Master of Science in Data Science | GPA: 3.96

Honors/Awards: Winner of Best Prediction Model for UW Data Science Hackathon 2020

Relevant Coursework: Statistics and Probability, Data Visualization, Machine Learning for Big Data, Software Design

RUTGERS UNIVERSITY | New Brunswick, NJ

May 2019

Bachelor of Science in Computer Science | GPA: 3.79

Bachelor of Arts in Statistics | GPA: 3.62

Honors/Awards: Dean's List, Computer Science Departmental High Honors, Statistics Departmental Honors

Relevant Coursework: Information and Data Management, Computing and Graphics in Statistics, Artificial Intelligence

TECHNICAL SKILLS

Coding Languages: Python, Java, C, R, SQL, HTML, SAS, JSP

Coding Packages: Scikit-Learn, NumPy, Matplotlib, Plotly, Pandas, PySpark, Flask, PyTorch, TensorFlow

Operating Systems: Windows, Linux, Mac OS

Other Tools: Tableau, Microsoft Office, Adobe Photoshop, Adobe InDesign

Languages: Native English, Chinese

WORK EXPERIENCE

The Clorox Company, Data Science Intern | Pleasanton, California

June 2021 – August 2021

- Developed end-to-end Multi-Touch Attribution Model to attribute credit to marketing campaigns for a customer purchase
- · Designed modules to query data, clean the data, model the data, and generate a visualization for the user
- Saved marketing spending on underperforming marketing campaigns while maintaining optimal customer purchase
- Designed and developed a trend anomaly diagnostics system which assisted in understanding how and why an anomaly occurred; enabling users to interpret and take action when facing a detected trend anomaly alert

Inner Mongolia Sunnergy Co., Data Science Intern | Hohhot, China

May 2018 - August 2018

- Collaborated with factory engineers to design an experiment to collect data about factory machines and output
- Generated regression models with data; analyzed and evaluated the models for accuracy
- Discovered which machine factors impact output the most, and how to modify those machine factors
- Achieved 4% faster machine output by modifying impactful machine factors

PROJECTS

BEReddiT (Python, PostgreSQL, Heroku)

Spring 2022

Analyzed controversy in Subreddits and designed a data visualization dashboard to display results

- Modified and maintained Subreddit data scraper with Asyncpraw
- Designed pipeline to preprocess subreddit data and feed into BERT model to get topics and sentiment analysis on subreddits
- Wrote a module to get comment relevancy to their post
- Designed "controversy" metric from topics, sentiment, and relevancy to rate "controversy" of a subreddit
- Developed data visualization dashboard to show results of topics, sentiment, relevancy, and controversy using Plotly Dash

COVID-19 and Government Policies (Python, SAS JMP)

Summer 2020

Find which government policies were the most effective at slowing down COVID-19 cases

- Searched and scraped data online regarding COVID-19 cases and government policies implemented in the United States
- Cleaned the data into a usable format for machine learning algorithms by using Pandas package from Python
- Analyzed government policies from generated auto-regression time series and SAS JMP graphic visualizations and removed nonimpactful government policies from the regression
- Discovered the most impactful government policies were mask mandates and gathering restrictions of any size

Digit and Facial Classification (Python)

Fall 2018

Implemented Naïve Bayes, Perceptron, and MIRA algorithms to identify values of handwritten digits and to detect faces in photos

- Split the data set into three categories: training set, validation set, and test set
- Developed code to train all three algorithms on the training data set
- Analyzed the three algorithms predicting abilities on testing set; discovered Naïve Bayes worked best with an 88% prediction rate