Ray Yi

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Experience

Pacific Life

Predictive Data Analytics Analyst — Newport Beach, CA (June 2020 - Present)

- Developed time-series model that improves call volume forecast MAPE by 10% and queue time MAPE by 70% using ARIMA and h2O.ai in Python, connected to Tableau dashboard that highlights call center metrics
- Maintained Python app that stores daily work/staff volume in Snowflake used to update Tableau dashboard that highlights production needs and recommends resource sharing strategies, reducing overtime by 25%
- Conducted contract unit cost analysis by cleaning/manipulating various data sources in Pandas, developed metrics for data storytelling, providing new insights on budgeting from a contract perspective
- Implemented Python-Snowflake ETL processes scheduled on Alteryx server that power Operations reports/dashboards

Data Science Intern — Aliso Viejo, CA (June 2019 - August 2019)

- Built RShiny dashboard that visualizes and ranks policy abnormality from >100,000 policynumbers using PCA, K-Medoids Clustering, and Manhattan Distance, data wrangling done in SSMS, Alteryx, and R
- Led weekly meetings to discuss feature engineering and app design/functionality for insurance disbursement fraud

Wing AI Technologies

Data Science Intern — Irvine, CA (October 2018 - May 2019)

- Developed and maintained user activity metrics, identified spikes in abandoned chats and determined optimal agent shifts based on user behavior, decreasing abadonment rate by 20%
- Scraped web pages of competing prices with BeautifulSoup and merged data with Pandas for pricing strategy

Education

University of California, Irvine — Irvine, CA (August 2016 - June 2020)

- Major: B.S., Data Science; Minor: Business Management; GPA: 3.5; Dean's Honors
- Relevant Coursework: Statistical Methods for Data Analysis, Database Management, Machine Learning, Probability & Statistics, Information Visualization, Programming in Python I-III, Data Structures and Algorithms

Skills

Programming Python, SQL, R, C++, HTML/CSS/JS, LaTeX
Frameworks/Applications Pandas, Snowflake, Tableau, Scikit-Learn, Statsmodels, Matplotlib, Alteryx, h2O.ai, Git
Languages Fluent in English and Mandarin; Conversational Proficiency in Spanish

Selected Projects

Time Series ARIMA Sales Forecast Dashboard (October 2021)

- Tableau Dashboard that visualizes 3-month projection of daily sales, Kaggle competition top 30, with 20% MAPE
- Dashboard automated by python script that connects to database, manipulates data to optimize time series model, and uploads forecast back to database, consumed by Tableau, ran on a schedule via Alteryx

2020 Presidential Candidate Sentiment Analysis (March 2020)

- Jupyter Notebook that reveals Twitter perception of Presidential Candidates using Tweepy and PostgreSQL
- Designed database schema for Tweets, streamed Tweets, and conducted Sentiment Analysis with NLTK and sklearn

KinectBeats - 1st Place HackTech 19 - Python Motion-to-Music Platform (March 2019)

- Music platform implemented with Kinect API to map hand gestures to sounds coded with Sonic Pi in Python
- Improved gesture recognition precision and accuracy by tweaking existing gesture images for a more diverse dataset

Activities

Undergraduate Society of Statistics and Data Science

Vice President — Irvine,CA (February 2017 - January 2020)

- Coordinated events that hosted professionals from different industries to educate the club of real life data applications

Boy Scouts of America Alumni Association

Eagle Scout Alumni — Fremont, CA (December 2016 - January 2020)

- Planned and led weekly meetings for over 100 active scouts as alumni volunteer, increasing attendance by 20%

UCI Men's Varisity Table Tennis Team

Coach, Player — Irvine, CA (September 2016 - January 2020)

- Competed in 2019 NCTTA iSET Nationals finishing 4th, led team to 2 western regional conferences finishing 3rd