**Shihao (Charles) Ying**

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**Qualifications**

**Programming Languages:** SQL, Python (NumPy, Scikit-learn, pandas, matplotlib, seaborn, keras, jupyter notebook, Scrapy), SAS

**Platforms**: Bloomberg, Git, Visual Paradigm, Eikon, FactSet, Oracle NetSuite

**Software**: MS Visio, MS Project, SAS Enterprise Miner, SAP, Tableau

**Certifications**: Bloomberg BMC, Eikon DataStream, FactSet on Financial Modeling, Data science with Python workshop, Advanced Google Analytics

**Awards and Honors**: Scholar of Distinction (2018), Scholar of High Distinction (2018)

**Statistical/Modeling Skills**: Linear regression, Classification, A/B Testing, k-NN, Decision Tree, Neural Network, K-Means Clustering, Applied Machine Learning, Business Data Warehousing, Financial Modeling, Business Analytics with SAS

**Education**

M.S., Information Technology Management University of Texas at Dallas, 08/2016-06/2018

M.S., Finance University of Texas at Dallas, 01/2017-12/2018

B.S., Business Law Shanghai University of International Business and Economy, 09/2011-06/2015

**Work Experience**

**Operations Analyst, Supply Chain**  April 2019 – Present

*Zendure USA Inc.*  Palo Alto, CA

* Responsible for all aspects of strategy creation and implementation, forecasting, sales account management, inventory management, training and education to a select number of enterprise customers in the western US
* Work with Zendure internal partners (Finance, Credit, Sales Management and Product Group) and external partners (Amazon, Shopify and Until Gone, etc) to drive continuity of supply solutions and sales improvement
* Assist in standardizing business reporting for strategic analysis and internal business review, implement and maintain metrics of customer forecast and fulfillment including historical data analysis, waterfall analysis, trending analysis and etc.
* Develop and implement continuity of supply strategy such as lead time reduction and material flexibility plans, contribute to the support of global FDL efforts including bid/negotiation analytics, and continuous system improvement
* Execute contractual requirements as well as meets with suppliers to discuss performance, cost opportunities, and future operational strategies, partner with the factories to drive the lowest possible materials and service impact to tool availability
* Work independently and take ownership of obligations, exercise judgment and operate under ambiguity

**Business Analyst Intern**  May 2018 – April 2019

*AILaw Inc.*  San Jose, CA

* Provided business analysis expertise to improve products, interpreted customer needs and translated them to user stories and product feature requirements
* Worked closely with business stakeholders, UX designers, project managers, full stack engineers to implement versatile web and mobile solutions
* Created a database of 70,000+ H1-B holders through Python Scrapy, generated a list of potential customers in California to help the sales team develop 3 new company connections through Tableau
* Evaluated internal data and reporting systems for efficiency, problems, and inaccuracies; recommended and implemented improvements

**Highlighted Academic Projects**

**Calculating eCommerce Growth Projections (Python)**

* Explored and visualized e-commerce data using Plotly, to view Monthly Revenue, Monthly Revenue Growth Rate, Monthly Active Customers, Monthly Order Count, Average Revenue per Order, New Customer Ratio, Monthly Retention Rate, Cohort Based Retention Rate
* Created segments for customer data based on RFM (Recency - Frequency - Monetary Value) and calculated recency, frequency, and monetary values by K-means cluster
* Calculated lifetime values of customers, converted categorical columns to numerical columns by dummy data, created cluster columns of customers based on the lifetime values, and used XGBoost to predict the customer classification with 90% precision
* Predicted churn rates using logistic regression & XGBoost, and identified the most important feature ( Total Charges and Monthly Charges)
* Predicted Next Purchase Day by XGBoost, performed cross validation by logistic regression, GaussianNB, Random Forest, SVC, Decision Tree, K-Neighbor Classifier, and optimized model using hyper parameter tuning
* Used Long Short-term Memory (LSTM) method and Keras to predict sales revenue for the next 3 months, analyzed control group and experiment group to test market responses and customer growth

**Movie Recommendation System:**

* Analyzed a dataset from TMDB consisting of 26,000,000 ratings and 750,000 tag applications, performed EDA (explore data analysis)
* Explored the data to identify key features of movies, including languages, countries, collections, financials, budgets, revenues, runtime, etc., extracted features based on EDA
* Created a content-based recommendation system based on movie overviews, taglines, movie casts, keywords, and genres, used cosine similarity to calculate the similarity among movies, optimized the system by adding popularity and ratings
* Created another recommendation system using user-based collaborative filter and added more personalized featured to the model, used SVD to suggest users’ similarity, combined both recommendation systems, content-based and user-based, for the complete user experience