

Haohan Zhao

DATA ENGINEER · DATA SCIENTIST

☎ 513-319-5688 | ✉ haohan.zhaozhao@gmail.com | 🌐 haohanzhao | 🏠 Seattle, WA | 🛂 No visa sponsorship needed

Industrial Experience

Amazon Inc.

Seattle, WA

BUSINESS INTELLIGENCE ENGINEER II

Sept. 2021 - Now

- Iterate Amazon Seller Central e2e user experience by working with SDEs and PMs to define, implement, monitor and display metrics to Amazon 3rd Party Sellers
- Build data pipelines from online prod to offline data lake, drive communication with internal partners to schematize and automatically generate reports and dashboards for decision-making.
- Lead new feature development in Seller Central by using hierarchical clustering, summarized findings and effectively communicated in a compelling way to senior leaders and drove business actions.
- Navigate engineering teams through presentation of data-based recommendations, communicating state of business, experiment results and implement best practices.

Foursquare Labs Inc.

Seattle, WA

DATA SCIENTIST

Nov. 2020 - Aug. 2021

- Conducted Product Iteration and validated the effectiveness on our attribution portal new features by collaborating with PMs.
- Performed Campaign Monitoring using Waze as 3p measurement solution partnership, interpreted campaign result metrics such lift, total visits, incremental visits, cost per visits and cost per incremental visit using z-test and machine learning models to derive insight for future customer targeting.
- Actively built processes and tools to make data more accessible and interpretable, communicated with internal partners to define appropriate data reports and dashboards that became integral to the decision-making process.

American Express (EXL Service)

New York City, NY

SENIOR DATA CONSULTANT

Sept. 2017 - Nov. 2020

- Unsupervised Learning: Used K-means method to segment customers with different AMEX marketing shares and implement different marketing strategies with the existing online first touch and linear attribution models.
- Supervised Learning: Predicted 2019Q4 short-term debt for small business owner by developing an XGboost model with 38% GINI based on financial history, assisted with the sales team on engaging 1.5% more customers compared to the holiday season in 2018
- A/B Testing: Worked with creative and e-commerce teams using A/B split testing on mail content, landing page, promotion as well as cross-channel marketing combining direct mails, emails and display ads
- Marketing Analysis: Initiated campaign plans and forecast as well as new strategies to achieve 200% ROI goal, oversaw \$16M annual budget, utilized 99% of the budget and saved 84% of the cost per funded loan.
- Data Visualization: Created campaign performance dashboards, conducted loan and application performance analysis using Snowflake and Tableau, presented results to senior management.

AXCESS Financial

Cincinnati, OH

RISK ANALYST, PREDICTIVE MODELING & CREDIT RISKS MANAGEMENT

Dec. 2015 - Sept. 2017

- Fraud Detection Dashboard: Evaluated and proposed the recommendations for the 32% streamline effectiveness of fraud detections tools across multiple ID verifications, online fraud platform, and customer behavior analysis
- Data Tidying & Wrangling: Used Regex to clean Json data with Hive functions, worked with Data engineer to create cleaning logic for special Japanese character
- Regression: Collaborated with 3rd party data vendor (Experian and Clarity) to prepare customer trade-line data and built new installment loan credit scorecard model to predict the probability of default for customers with customers' trade-line information
- Model Validation: Built robust validation exercise to verify the accuracy and stability of the models, on in-sample and out-of-time data, and to avoid inaccurate prediction and low model stability
- Enhanced risk decisions by incorporating new information, new techniques, and changing factors, built strong relationships and provided proactive and thoughtful communications to stakeholders and partner teams, managed multiple priorities/projects for effective end-to-end processes

Projects

Drone Grocery Delivery Service

- Designed and developed a visualization Drone Grocery Delivery Service application using JAVA to summarize historical user order data
- Utilized Node.js for back-end application and communication with MySQL database.
- Implementing a JSON Web Token authorization flow with React Router and Spring Security for enabled sign-up and login in.

Game Swapping Platform

- Retrieved SWAP history and optimize pricing strategy and stored trading data in MySQL database.

Academic Degrees

2022	M.S. in Computer Science, Machine Learning Concentration , Georgia Institute of Technology	<i>Remote</i>
2015	M.S. in Financial Mathematics , University of Cincinnati	<i>Cincinnati, OH</i>
2014	B.S. in Applied Mathematics , Xiamen University	<i>Xiamen, China</i>