

Haohan Zhao

DATA ENGINEER · DATA SCIENTIST

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Industrial Experience

Amazon Inc.

Seattle, WA

DATA ENGINEER

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 ETL data pipelines from online prod to offline data lake, drive communication with internal partners to schematize and automatically generate reports & dashboards for decision-making.
- Drive new feature development in Amazon Seller Central using hierarchical clustering, train and deployment model in AWS service, 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 3rd party 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

- Build a K-means model using scikit-learn to segment customers with different AMEX marketing shares, implement different marketing strategies with the existing online first touch and linear attribution models.
- Predicted 2019Q4 short-term debt for small business owner by developing an XGboost model using machine learning platform
- 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

- Create dashboard using SQL and data pipeline for visualized fraud detections tools and customer behavior analysis
- Use Regex to clean JSON data with Hive functions, create cleaning logic for Unicode character
- Built robust validation to verify the accuracy and stability of the models, on in-sample and out-of-time data, avoid inaccurate prediction and low model stability

Projects

Drone Grocery Delivery Service

Georgia Institute of Technology

- Implement a client-side drone grocery delivery management system
- Develop GUI using Java Swing and connect to MySQL database using Hibernate

Game Swapping Platform

Georgia Institute of Technology

- Build a cloud-based web app for game swapping
- Create front-end UI using HTML, JavaScript and CSS. Improve user experience using jQuery and Bootstrap libraries
- Use web.py framework to build backend, connect to MySQL database, deployed in AWS

Skills

Programming Language Java, PHP/Hack, TypeScript/JavaScript, HTML, Python, SQL/NoSQL, GraphQL, Go, Shell, \LaTeX

Frameworks & Software React, Angular, Node.js, HTML/CSS, MongoDB, PostgreSQL, Guice, Spring, Git/Mercurial

Academic Degrees

2022 **M.S. in Computer Science, Machine Learning Concentration**, Georgia Institute of Technology

2015 **M.S. in Financial Mathematics**, University of Cincinnati

2014 **B.S. in Applied Mathematics**, Xiamen University

Remote

Cincinnati, OH

Xiamen, China