Qianyi Sha

Junior Software Engineer
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Profile Summary

- Computer Engineering student, experienced in building and deploying full stack solutions. Well versed in Object-Oriented Programming, data structures & algorithms, machine learning, computer vision and image processing.
- Full-stack developer with a strong command of programming languages including Python, SQL, C/C++, Java and JavaScript. Proficient in designing UIs with React, writing server-side code and building APIs, and manipulating SQL & NoSQL databases. Solid understanding of Authentication, Security, and version control.
- Fast learner able to rapidly ramp-up and develop new skills, and enthusiastic problem solver, comfortable with providing innovative & creative solutions to achieve more and faster.
- Key contributor to the team, available to support and collaborate with others. International profile, fluent in English and Chinese, thriving in a multicultural & diverse work environment.

Education

University of Washington, Seattle
M. Sc. in Electrical & Computer Engineering
Seattle, WA, 2021-2023 **GPA: 3.87/4.0**

University of California, Irvine
B. Sc. in Computer Science & Engineering
Irvine, CA, 2016-2020
3 appearances on Dean's honor list

Languages

English: Fluent **Chinese**: Native level

Technical skills

Languages: Python, SQL, C/C++, Java, JavaScript / HTML, CSS
Frameworks & Libraries: React.js, Django, Scikit-Learn, PyTorch, Tensorflow, OpenCV
Databases: MySQL, SQLite **Web services & tools**: Git, Azure Cloud
BI: Tableau

Professional Experience

Youyuan — Software and Data Engineer Intern

Beijing, China Jan. 2021 - Jun. 2021

- Contributed to a dating application's technical effort by constructing data pipelines, identifying important data nodes, data cleansing, data collecting and analyzing, to optimize the processing of 100k users generated data daily.
- Establish high-level requirements by engaging with stakeholders and detailed understanding of what is to be built, by asking calibrated questions. Define key characteristics in a design document to facilitate implementation.
- Engaged in regular meetings with key stakeholders such as Data Analytics, Data Management and Operation teams and other engineering teams, to provide & retrieve updates, identify and remove roadblocks and track progress.
- Created a ML model based on Decision Tree and Logistic Regression to predict user subscription rate, increase conversion rate by over 10% by identifying users' key interest points.
- Constructed statistical metrics to evaluate service performance, including user behavior & group statistics.
- Leveraged technologies including Python, SQL, jupyter notebook, and scikit learn to build solutions.
- Shadowed Sr. Engineers, seeking opportunities to contribute while observing their work to learn best practices.

Lenovo — Data Analyst Intern

Beijing, China Jun. 2018 - Aug. 2018

- Designed and implemented a web crawler to automatically pull client feedback from 3 different e-commerce websites. Processes hundreds of feedback daily, reducing engineer's efforts by 1 hour per day.
- Constructed a data pipeline to collect, clean, analyze client feedback and assemble post-sale reports. Used Python, SQL and Tableau for builds.

Project Experience

Development of E-Commerce website

Apr. 2022 - Present

- As a personal project, developed a full-stack E-Commerce website, leveraging React with React Bootstrap as a front-end framework with the Redux, and built the back-end with Python, Django and RESTful API. Uses SQLite as a database. Enabled payments by integrating the Paypal API and utilized Git for project management.

Covid Vaccine Reservation System

Mar. 2022 - Jun. 2022

- Developed a command line based vaccination reservation system serving both patients and vaccination providers.
- Implemented the system with Python and the pymssql library. Used SQLite as a database and hosted on Azure cloud.

Recommendation System

Jan. 2022 - Mar. 2022

- Implemented a movie recommendation system with the MovieLens 25M dataset, using structures including: User/Item Collaborative Filtering, Content based search, SVD, and Neural Collaborative filtering.