Shengxiang Xu

almost4x@gmail.com | 213-421-9155 | waynexiangney.github.io

Objective: Full-Time Software Engineer, 2022 Spring

EDUCATION

University of Southern California   Los Angeles, California
Master of Science in Computer Science (GPA:3.7/4.0)   *May. 2021*

Jilin University   Changchun, China
Bachelor of Engineering in Software Engineering (Top 3 of 350 students)   *June. 2018*

SKILLS

- **Languages**: Java, Python, Swift, Javascript, Typescript, C#, SQL, HTML5, CSS
- **Frameworks**: Vue, Angular, React, Django, Flask, Spring Boot, Spring Cloud, Hibernate, Express, Unity
- **Databases**: MongoDB, MySQL, PostgreSQL, Redis, SQLite
- **Tools**: AWS, GCP, Docker, Git, Linux, Postman

EXPERIENCE

TuSimple   San Diego, California
Software Engineer Internship & Full-time   *Jan. 2021- Current*

- ○ *Developed a command line tool and a package management platform for users to manage packages and dependencies. (Python, Shell, C++, JavaScript, Vue, MongoDB)*
- ○ *Created a full-stack platform for users to integrate packages, build docker images and perform offline validations for on-truck test. (TypeScript, Python, Vue, Flask, MongoDB)*
- ○ Built Validation and Manifest model as new APIs in Flask microservice for team to use, used mongoengine to interact with MongoDB, ran the microservice inside docker containers.
- ○ Optimized the task manager by using celery, redis and MongoDB to process concurrent validation tasks, which doubled the processing speed.
- ○ Implemented Vue based frontend using WebPack, Yarn, with Hooks for states and reducers, styled-components for CSS styling effects and Jest for test.

CarmaCam   Santa Monica, California
Software Engineer Internship   *Jan. 2020- May. 2020*

- ○ *Developed a new scoring back-end logic for DUI detection microservice, which reduces the cost of human reviews by $18k per week. (Python, Django, PostgreSQL, Docker)*
- ○ Developed backend based on Django and interacted with Redis and PostgreSQL to process video data.
- ○ Improved the performance of recognition functionality in the existing license plate recognition based on OpenALPR by training tons of samples into the library,which increased the accuracy to 98.2%.

PROJECTS

- **eBay Product Search Platform**: (Java, TypeScript, Angular, Spring, Android app)
  - ○ Built a product search service platform based on **full stack**, where customers can search products, filter categorized products, view product details, and add them to wishlist and cart online.
  - ○ Developed an **Android mobile app** in **Java** and handled frequent networking operations by using Volley framework.
  - ○ Implemented frontend websites with **Webpack**, **Angular9**, which adopted **responsive** design approach and fit in mobile, tablet and desktop devices with Bootstrap. Effectively implemented server side using **Spring Frameworks**.
  - ○ Deployed a lightweight backend on **GCP** which fetch and filter data from eBay.com.
- **News Flipboard**: (Swift, JavaScript, React, Node.js, iOS app)
  - ○ Developed a **full stack web application** to display news fetched from New York Times and Guardian News by using their APIs. Users could open up any news, add comments to it, share it via social medias and add it to favorites.
  - ○ Constructed frontend **responsive** web pages supporting different devices using **React.js** and **Bootstrap**.
  - ○ Built backend RESTful server in **Node.js** with Express, interacted with **Redis** and **MongoDB**.
  - ○ Designed an **iOS mobile app** using **Swift** and Storyboard which achieves the same features.
  - ○ Deployed websites to **AWS** EC2 server, and used Nginx as load balancer.
- **Sokoban Puzzle**: (C#, Unity)
  - ○ Led a team to design a **social mobile** Sokoban puzzle game based on **Unity** in which players can upload and delete their own unique game level design that can be enjoyed, commented, gave thumbs up by others.
  - ○ Implemented the level management, character control, obstacles, dialogue systems and community scene using **C#** and stored players' data in **MySQL**.
  - ○ Built a data tracking model by **Unity Analytics** to monitor average time-elapsed to complete the current game level and total number of events from all current players.