Huanbin Chen

137 Chestnut St, Apt 212, Santa Cruz, CA 95060 • huanbin.c@gmail.com • (831)400-9303

Education

University of California, Santa Cruz

M.S. degree in Computer Science.

Santa Cruz, CA Sep 2019 – Jan 2021

Central South University

B.Eng. degree in Internet of Things Engineering

Changsha, China Sep 2012 – July 2016

Work Experience

Alibaba Cloud Frontend Developer Hangzhou, China July 2016 – May 2018

- Rewrite the Mobile Quality Center project using TypeScript, React and MobX, abstracting duplicate
 logics into reusable and customizable components, which enables fast development by non-frontend
 developers with basic knowledge on React.
- Develop an internal task management platform with **React** and **Redux** used by the entire quality control department in AliOS.
- Maintain and update a real-time Android devices remote control system written in **Node.js**, adding retry and lifecycle logic to the **WebSocket** connections, increasing the robustness of the system.
- Create and maintain a customizable component library extended from **React Bootstrap**, enforcing consistent design across core web projects.
- Write internal tools in **Node.js** to assist compiling, debugging and publishing process, reducing 8 manual operations to 2.
- Integrate a versioned resources publishing process and an online monitor system, reducing the chance that exceptions reach to users by 90%.
- Move the rendering layer in Java server (JSP) to front-end (React) and standardize the RESTful API for the Java backend server, which reduces the need for publishing backend and improves collaboration.
- Develop high-performance interactive graphs using **canvas 2D**, **SVG**, and **D3.js**, reaching 80% daily usage from users.

Projects

Children Epilepsy Diagnosis Record System

- Develop the backend server using **Django**, **Django ORM**.
- Design a flexible database structure that can evolve and horizontally scale using MySQL.
- Implement a single page web app using **Vue.js** with printable and auto inference forms.
- Deploy the system in the children epilepsy department of a local hospital.

Operating System Simulation

- Simulate the preemptive CPU scheduling, PCB state management, RAM, memory allocation and deallocation, disk drive allocation and file system using **Java**.
- Implement the real-time web user interface using **Polymer** and **websocket**.
- Create an Express.js server with node-java bridging Java logics and the Node.js server.

Parking Garage System

- Implement the **Node.js** server that reads and writes parking data into an RFID card.
- Create a **Node.js** addon using C++, enabling the node server to utilize the RFID reading API.
- Develop the user interface with Angular.js.

Skills

Languages: JavaScript, CSS, HTML, Java, Rust, Python, C++, Bash, Git.

Frameworks/Techniques: React, ES6, Webpack, Node.js, jQuery, Vue, MySQL, MyBatis.