Jiannan Huang

jiannanh@usc.edu | (213) 675-7625 | Los Angeles, CA 90007

SKILLS

Programming Languages: Typescript, Java, C++, Javascript, HTML5, CSS3, JSX , SQL, Node, GraphQL, Apllo Server
Frameworks: React, Vue, Redux, Node Express, Flask, Bootstrap
Libraries: React.JS, JQuery, Vue, AntD, AntV, Material-UI
Highlights: Data Structure and Algorithm, Digital and Computer System Architecture, Computer Networks, Database Management Systems

EDUCATION

MS in **Computer Science**, University of Southern California	GPA 3.80/4.0	September 2019- December 2022
BE in **Mechanical Engineering,** University of Birmingham	GPA 4.25/4.25	September 2017- June 2019
BE in **Mechanical Engineering,** Huazhong University of Science and Technology	GPA 3.86 /4.0	September 2015- June 2019

WORK EXPERIENCE

Software Engineer Intern |**Tencent**, Shenzhen, China|May 2020 - January 2021
Low-code API generate platform

- Build a low-code JSON to MySQL APIs generate platform using **TypeScript** which help generate API quickly, reducing current and future API coding work and bugs, and generate formatted API document automatically, reducing document work (2 patents publishing)
- Designed and developed low-code platform functionality using **React** framework, GraphQL and Apollo, and enable people write JSON config on online editor, and visualize all process step by step
- Parse JSON config file to CRUD multiple databases by using TypeORM, and generate RESTful or GraphQL API

Content-sharing Author CRM platform

- Developed and maintained a Content-sharing Author CRM platform including author connection, admin permission control, post review, article audit, author introduction to helper operation staff collaborate with thousands of authors
- Developed and maintained in **React** framework, utilizing **react hooks, Redux, and Ant Design libraries, Axios**
- Improved web user interface for historical connected data chart, authors contact information, filter authors using **JSX**, and optimized the chart by using CSS, Ant Design and Ant Visualization
- Collaborated with project team with new application feature roll out using Git, CI/CD, and DevOps tools, backtracking historical feature and solving product update merge conflicts and uniform code specification during deployment using Git, ESlint, and commitlint
- Improved the overall web performance by using CDN, and code splitting in Webpack with dynamic imports, and support on system-related issues report by using **Sentry**

PROJECTS

News display search website - Web Application

- Built a responsive news search web application that can provide real-time news information from main news using **HTML/CSS, Typescript** with **React**
- Added features of search autocompletion, dynamic component loading, and local storage changing/retrieving by React service unit, centralized **API** calls, and optimized scalability from Fox, CNN, and New York Times
- Built a **Node.JS Express** server for **React** content rendering on **AWS** cloud and utilized pipeline for deployment and server-side editing
- Created a **Node.js - RESTful API** to centralize **HTTP** from the user-end, and asynchronously retrieve resources across different domains, made **HTTP** requests to NewsAPI; Parsed **JSON** data and filtered unnecessary content to reduce load time on the user-end

Stock Application – Android 10

- Designed and developed an Andriod 10 application using **Java, XML** on **Android Studio,** to search for stocks, buy/sell stocks with virtual cash, identify market trends with SMA & volume by price indicators chart
- Enabled the function to add stocks to watchlist and store them using Andriod shared preferences, added additional features to display current price, price changes, trading volume, open price, company
- Created web stock chart using **React.js** to support Andriod Webview feature by integrating with **HighChart API** and **HTTP querying**

A Kinect-Based 3D Vision System for Robotic Disassembly
Undergraduate Researcher, Advisor: Prof. Duc Pham & Dr. Yongjin Wang

- Built a vision system which could recognize the work part and locate the position of the project
- Proposed a linear P4P (Perspective 4 Points) solution to obtain the extrinsic parameters in camera pose estimation process and analyzed the geometry constraints of the four reference points
- Used the HSV color space segmentation method to extract the object from the background
- Investigated the impacts from the external environment by analyzing the experimental results obtained from the vision system under different conditions