Jiannan Huang

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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

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

- Built 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 generated 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

- Parsed JSON config file to CRUD multiple databases by using TypeORM, and generated 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 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 supported on system-related issues report by using **Sentry**

Undergraduate Researcher| **University of Birmingham** |September 2018 - June 2019
A Kinect-Based 3D Vision System for Robotic Disassembly

- 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

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

Web Application – Android 10

- Designed and developed an Andriod 10 application using **Java, XML** on **Android Studio,** to search for news
- Enabled the function to store them using Andriod shared preferences, added additional features to display date, categories, source, omments
- Created web stock chart using **React.js** to support Andriod Webview feature by integrating with **HighChart API** and **HTTP querying**