

Jiannan Huang

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SKILLS

Programming Languages: Typescript, Java, C++, JavaScript, HTML5, CSS3, JSX, SQL, Node, GraphQL, Apollo Server

Frameworks: React, Vue, Redux, Node Express, Flask, Bootstrap, 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 3.76/4.0

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 | **Google**, Mountain View, California | August 2022 - Nov 2022

Source Schema Overlay Auto Converter

- Convert table schema overlay to new format automatically and reduce manual conversion and verification of 350+ tables.
- Optimize the inconsistency comparison view to make it easier to locate differences and errors.

Database table schema redesign and migration

- Redesign the schema to reduce data inconsistency with around 100k query count per week
- Migrate data from old table schema to new table schema and validate data consistency

Software Engineer Intern | **Salesforce**, Bellevue, Washington | May 2022 - August 2022

Core App Bytecode Performance Instrument

- Developed instrumentation that collects performance metrics of specific methods within the Core App
- Attached the instrumentation to Core App's bytecode, and injected performance instrumentation code into target classes/methods
- Instrumenting without changing source code helped reduced the investigation time from a couple of days to a few minus
- Developed using **JAVA**, **JVM**, **Linux**, **Shell**, **Javassist**, **JFR** profiles

Backend Performance Measurements Display Platform

- Extended a results platform with data of backend performance results that and bugs
- Created **NodeJS** - **RESTful API** server efficient query to retrieve data from **PostgreSQL**
- Built navigation bar, data table, bugs, and recent trending lines using **JavaScript**, **HTML**, **CSS** and **Lightning Web Components (LWC)** framework)

Software Engineer Intern | **Tencent Inc**, 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**
- parameters in camera pose estimation process and analyzed the geometry constraints of the four reference points

PROJECTS

News display search website - Web Application, Android 10

- Built a responsive news search web that can provide real-time news 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 **NodeJS 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 News APIs; Parsed **JSON** data and filtered unnecessary content to reduce load time on the user-end