Kairui Liu

Front-End Engineer

✉ kairuiliu@msn.com | 📞 +64 0273360288 | 🌐 liukairui.me | in LiuKairui | ○ KairuiLiu

EDUCATION

University of Auckland   2022 – 2024
Data Science   🎓 Master Rank --
Southwest University   2019 – 2023
Computer Science(Data Science)   🎓 Bachelor Rank 3%

SKILLS

😄 Experienced: JavaScript, TypeScript, and common features of ES6+.

😄 Experienced: Vue.js & React project development. Understand basic principles of Vue.js.

😄 Experienced: HTML, CSS, Less, Ajax, jQuery, have experience in performance optimization.

🙁 Familiar: build (Vite, webpack, Gulp) & engineering tools (Prettier, ESLint, Git, husky).

🙁 Familiar: Node.js, capable of building simple CRUD Web services using Express.

🙁 Familiar: visualization frameworks (D3.js & Three.js). Implemented sites using them.

🙁 Familiar: WebRTC APIs. Implemented a video call website based on WebRTC.

😄 Experienced: Linux useage and basic services config (DHCP, VSFTP, Samba, Rsync, LNMP+LVS).

EXPERIENCES

ByteDance(TikTok Company) Front-End Development(Internship) [React][Extension] 2022.12 – 2023.04

🔤 Completed web page translation SDK. Researched 7 competing products and summarized 2 implementation approaches. Proposed **technical goals of on-demand loading, update tracking, JavaScript transparency, structure and style preservation, and whole-section translation**. Developed a **translation optimization strategy based on node names** and implemented a minimal update tree recognition solution, drawing inspiration from Vue's update logic. Achieved multi-round synchronous tasks and micro-task **performance optimization**, increasing translation node extreme mounting speed by 5.3 times and extreme update speed by 674 times. Conducted one internal technical sharing session and promoted the solution across departments twice.

🌐 Completed the reconstruction of the Volctrans Extension project. Optimized code isolation for plugin scenarios, front-end security, site adaptation, and cross-platform compatibility. Provided a PDF translation implementation plan and demo.

CERTIFICATES

The 7th China Collegiate Programming Contest Guilin Station   🏅 Gold Award
The 46th ICPC Asia Regional Contest Jinan Site   🏅 Bronze Award
Southwest University National Scholarship for Inspirational Students   2021
University of Auckland Transnational Education Partner High Achiever Award   2022

PROJECTS

⛏ **ThreeCraft**

Minecraft release based on Three.js. Released multi-platform (PC, mobile, controller, VR) and multiplayer gaming. Achieved full-frame rendering of about 200,000 blocks on integrated graphics. Technology: Three.js, TypeScript, Vite

Links: ○ GitHub 🌐 Preview

▼ **micro-vue**

After studying "Vue.js Design and Implementation," released a simple Vue. Released modules: runtime-dom, runtime-core, reactivity, and compiler-core. The reactivity module passed Vue official tests. Technology: TypeScript, Jest

Links: ○ GitHub 🌐 Preview

🐱 Animal Ethics & Procurement OA System

Built a platform for Southwest University school lab ethics review and materials procurement/sales. 10,000 registered teachers/students, 20 suppliers, greatly improved lab efficiency.

Response: Frontend, Operations

Technology: Vue3, G2Plot

Links: 🐙 GitHub 🌐 Preview

📐 Data View

A lightweight data maintenance, analysis, and visualization platform. Supports online data editing, analysis, and quick export. Ranked 9th in the 2nd ByteDance Youth Training Camp.

Response: data preprocessing module (type validation/filtering/formula fields)

Technology: Vue3, TypeScript, Pinia

Links: 🐙 GitHub 🌐 Preview 👤 admin/123456