

Kairui Liu

Front-End Engineer

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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](#)

Last build: 2023-04-13. [download the latest version.](#)