Online Version: cv.liukairui.me

# Kairui Liu

# Front-End Engineer

## **EDUCATION**

University of Auckland

Data Science

Southwest University

Computer Science(Data Science)

2022 - 2024

⋒ Master Rank --

2019 - 2023

Bachelor Rank 3%

## **SKILLS**

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

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

e 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.

e 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 7<sup>th</sup> China Collegiate Programming Contest Guilin Station
The 46<sup>th</sup> ICPC Asia Regional Contest Jinan Site
Southwest University National Scholarship for Inspirational Students
University of Auckland Transnational Education Partner High Achiever Award

¥ Bronze Award

2021

2022

## **PROJECTS**

## ThreeCraft

Minecraft release based on Three.js.
Technology: Three.js, TypeScript, Vite

Links: • GitHub • Preview

#### micro-vue

Simple Vue.js Implementation.
Technology: TypeScript, Jest
Links: GitHub Preview