Wu Xiaoyun

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Professional Experience

Frontend Software Engineer Intern — Money Platform *Tiktok*

Singapore 05/2024 - 08/2024

- Increased developer productivity by improving the speed of bundling assets (js,html,css) by 2x and significantly reducing CI pipeline run time and production deployment time (from 15 minutes to 10 minutes) for the Money-Platform through the migration from Webpack to Rspack. Drove a cross-functional collaboration involving Rspack, Rsbuild, Tiktok LIVE Solutions team.
- Enhanced Quality of Money-Platform by developing a white screen test summary page and enhanced the white screen alarm Lark bot. This improved debugging processes and developer experience with white screen alarms by providing detailed reports and debug information including console logs and network requests, viewable inside Chrome Devtools, eliminating the need to locally reproduce bugs and increasing the speed of handling alarms.
- Developed alarm Lark bot which streamlined alarm handling workflow and provided comprehensive analysis of alarm responses by aggregating and filtering alarms. Designed a standardized API for easy future third-party integration. Integrated white screen alarm with this standardized API.

Software Engineer Computing for Voluntary Welfare Organisations

Singapore 05/2023 - 08/2023

Reduced backend response time by 5 times by porting a Case Management System backend from Ruby on Rails to Golang.
Notable features ported include RBAC, Auth, 2FA and Masquerading.

Open Source Contributions

Rspack

• Made contribution to Webpack alignments, Javascript to Typescript migrations.

Projects

Expense Tracker

• Developed a cross-platform personal finance management application using Tauri, SolidJS, and SQLite. Implemented comprehensive transaction tracking with recurring payment automation, interactive financial analytics, and data visualization. Built with offline-first architecture featuring local SQLite storage, automated backups, and CSV import/export capabilities. Integrated clipboard-based automation for streamlined transaction entry. Leveraged modern web technologies while maintaining native performance through Rust-powered backend, resulting in a responsive and efficient mobile application.

RustScript

• Developed a statically typed, compiled programming language combining Rust's syntax with the simplicity of TypeScript and Go with core features including primitive data types, higher-order functions, type checking, and concurrency support. The language to compile code into bytecode, akin to Java, followed by execution on a virtual machine.

Education

BSc Computer Science, second major in Statistics National University of Singapore

Singapore 2022 - 2026

Focus areas: Programming Language and Parallel Computing

CCA

President Computing for Voluntary Welfare Organisations

09/2023 - 08/2024

Oversee the recruitment and application process for CVWO's 2024 Summer Internship program. Manage marketing, outreach, and operations for CVWO.

Backend Tech Lead NUS Students' NUS College Club

12/2023 - 04/2024

Designed and implemented Role Based Access Control for the for backend of the NUSC Club website

Skills

• **Programming Languages:** Typescript, Rust, Go, • **Technologies:** Reactjs, Solidjs, PostgreSQL, Redis Python, Java