

Alex Hu

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Github : <https://github.com/imalexhu> | Website : <https://imalexhu.com>

Education

The University of Adelaide

Bachelor of Science in Computer Science Advanced

Expected Graduation: May 2023

Work Experience

- **Full Stack Software Engineer** *PAC Digital* **Nov 2021 – Feb 2022**

Built out a NodeJs microservices designed to handle interactions between the main UNIDO app, and the Ripple blockchain. Allowing users to transfer between Ripple accounts.

- Developed familiarity using industry technologies like Docker and WSL.
- Built and deployed code in a TDD environment with Unit and E2E test with Jest.
- Improved transaction speed by 98% through a local cache storing transaction fee
- Created a service to automatically update token balances for Binance wallets.

- **Software Engineer** *Trust Provenance* **Jul 2021 - Oct 2021**

Enables users to store documents as encrypted hashes onto the HaderaBlockchain. These hashed documents can then be used to check if tamper has occurred and locate the tampering points.

- Implemented a Merkle Hash Tree to reduce the size of previous hashes by 99%
- Lead, designed and prototyped the architecture of the entire project, by building a MVP frontend, connecting it to a REST API which communicates to a MongoDB cluster.
- Worked in a highly agile environment and learnt to use tooling technologies like JIRA and Confluence.

Personal Projects

- **Omada** **February 2022 - February 2022**

- Built in 48 hours in a hackathon as a tool for automating employee onboarding processes.
- Gained experience being a Project manager by assigning JIRA tickets, maintaining the master branch, providing code reviews and designing the application's architecture.
- Built the server router and the connecting components of all the different services.

- **Front Running Bot - NodeJs** **December 2020 - Jan 2021**

- Created a trading bot to spy on the UniswapV2 router for incoming transactions, algorithmically determining the profitability of the transaction.
- Implemented a Trie to efficiently search for viable tokens to frontrun.
- Used MongoDB as a caching system to increase processing speed.

- **Personal Website - Angular** **February- 2021 - March 2021**

- Used Angular to build a dynamic personal website, with animated SVG and interactive effects.
- Deployed the static website onto the internet through firebase.

Community Engagement

- Adelaide University Competitive Programming Club (Member/Web Developer) **2021-Current**
- Adelaide University VolleyBall Club **2018-Current**
- Cancer Council Youth Ambassador **2016**

Activities

- ICPC (South Pacific) **2021**
- ANZAC **2021**
- Advent Of Code **2021**
- UniHack 2021 **2021**

Languages and Frameworks

(**Proficient**): C++, Javascript, Angular, MongoDB, Express (**Familiar**): Java, TypeScript