

## Experience

- |  |                     |
|--|---------------------|
| <b>Software Engineer at Knovel Engineering</b>   | Jan 2024 – Present  |
| <ul style="list-style-type: none"><li>Developed browser extensions for dynamic web scraping with LLMs and running remote browser automations with Puppeteer</li><li>Deployed a full-stack LLM web application to third-party and commercial cloud services</li><li>Developed and benchmarked AI solutions for speech-to-text transcription and speaker diarization</li></ul> |                     |
| <b>Software Engineering Intern at Fabrica.AI</b>   | Oct 2022 – Apr 2023 |
| <ul style="list-style-type: none"><li>Developed self-hosted CI/CD workflow for building, testing and deploying robot software with Jenkins</li><li>Implemented build systems, shell scripts and dotfile configurations to enhance developer productivity</li></ul>   |                     |
| <b>Software Engineering Intern at LUMIQ</b>  | Jun 2022 – Aug 2022 |
| <ul style="list-style-type: none"><li>Migrated self-managed plugins to support new Kubernetes versions on AWS EKS</li><li>Deployed a Google Apps Script add-on as a proof of concept to make optimizer API accessible from Google Sheets</li></ul>   |                     |
| <b>Software Engineering Intern at Netatech Engineering</b>   | May 2021 – Aug 2021 |
| <ul style="list-style-type: none"><li>Implemented resource usage, irrigation schedule and environment data visualizations with Plotly.js</li><li>Deployed serverless functions for remote device control with MQTT and AWS IoT Core</li><li>Prototyped an Android mobile application with Kotlin and AWS Amplify</li></ul>   |                     |

## Education

- |   |                     |
|---|---------------------|
| <b>Singapore Management University</b><br><i>BSc Computer Science (Artificial Intelligence Track)</i>   | Aug 2019 – Dec 2023 |
| <ul style="list-style-type: none"><li>GPA: 3.7 / 4 (Magna Cum Laude)</li><li>Recipient of SCIS (School of Computing and Information Systems) Achievements scholarship</li><li>Dean's List: AY2019-2020 (Year 1), AY2020-2021 (Year 2)</li></ul> |                     |
| <b>Raffles Institution</b><br><i>Singapore-Cambridge GCE A-Level</i>  | Jan 2014 – Dec 2015 |

## Projects

### ScamSword

- Prototyped offensive scam-prevention measures developed in collaboration with Open Government Products (OGP)
- Site inspect* analyzes URL, website DOM, and favicon to generate a comprehensive risk report
- Scam chat* feature facilitates anonymous chat sessions through Telegram APIs

### SourC-VM

- Compiler and virtual machine that targets a subset of the C programming language
- Support for compilation errors, type-checking, conditionals, loops, and stack and heap implementations with visualizations for debugging

### Spend Transactions

- Full-stack web application that ingests transactions, processes rewards for credit card expenditure and displays them to users
- Conducted automated infrastructure provisioning with CloudFormation and build releases with Github Actions

## Activities

- |   |                      |
|---|----------------------|
| <b>Volunteer at Better.SG</b>   | Aug 2022 - Present   |
| <ul style="list-style-type: none"><li>Active consultant for using no-code software tools to help beneficiaries improve digital workflows</li></ul>  |                      |
| <b>Volunteer Lead at Ground-Up Initiative</b>   | Aug 2019 – Sept 2022 |
| <ul style="list-style-type: none"><li>Led and coordinated volunteer participation in the flagship weekend programme “Balik Kampung”</li><li>Administered digital workflows for volunteer management, knowledge sharing and social media campaigning</li></ul> |                      |
| <b>Teaching Roles at Singapore Management University</b>  | Jan 2021 – Dec 2022  |
| <ul style="list-style-type: none"><li>Courses: Linear Algebra, Object-Oriented Programming, Computer Hardware and Embedded Systems, DevOps</li><li>Prepared practices and review materials to prepare juniors for major programming lab tests</li></ul>       |                      |

## Skills

- |                     |                                |  |  |
|---------------------|--------------------------------|--|--|
| <b>Languages:</b>   | English, Mandarin (All Native) |  |  |
| <b>Programming:</b> | Languages:                     | Python • Java • JavaScript • C • C# • SQL                                |  |
|                     | Web Development:               | HTML/CSS • ReactJS • Spring • ASP.NET • REST APIs                        |  |
|                     | DevOps:                        | Docker • Kubernetes • AWS • Google Cloud • Azure • Terraform • Gitlab CI |  |
|                     | Data Science & ML              | Tensorflow • Pytorch • Numpy • Pandas                                    |  |
|                     | Other:                         | Git • Bash • Linux • LaTeX   |  |