

## Experience

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- Software Engineer at Knovel Engineering** Jan 2024 – Present
- Developed browser extensions for dynamic web scraping with LLMs and running remote browser automations with Puppeteer
  - Deployed a full-stack LLM web application to third-party and commercial cloud services
  - Developed and benchmarked AI solutions for speech-to-text transcription and speaker diarization
- Software Engineering Intern at Fabrica.AI** Oct 2022 – Apr 2023
- Developed self-hosted CI/CD workflow for building, testing and deploying robot software with Jenkins
  - Implemented build systems, shell scripts and dotfile configurations to enhance developer productivity
- Software Engineering Intern at LUMIQ** Jun 2022 – Aug 2022
- Migrated self-managed plugins to support new Kubernetes versions on AWS EKS
  - Deployed a Google Apps Script add-on as a proof of concept to make optimizer API accessible from Google Sheets
- Software Engineering Intern at Netatech Engineering** May 2021 – Aug 2021
- Implemented resource usage, irrigation schedule and environment data visualizations with Plotly.js
  - Deployed serverless functions for remote device control with MQTT and AWS IoT Core

## Education

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- Singapore Management University**  
*BSc Computer Science (Artificial Intelligence Track)* Aug 2019 – Dec 2023
- GPA: 3.7 / 4 (Magna Cum Laude)
  - Recipient of SCIS (School of Computing and Information Systems) Achievements scholarship
  - Dean's List: AY2019-2020 (Year 1), AY2020-2021 (Year 2)

## Projects

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- CoastalClear** Jun 2024
- Web application using historical data to predict cleanliness levels of coastlines and coordinate volunteer cleanup efforts
  - Nominated as a finalist among 19 teams and undergoing further development in an accelerator round
- ScamSword** May 2023
- 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** May 2023
- 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** Nov 2021
- 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

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- Volunteer at Better.SG** Aug 2022 - Present
- Providing tech helpdesk and consulting services for nonprofits looking to improve digital workflows
- Teaching Roles at Singapore Management University** Jan 2021 – Dec 2022
- Courses: Linear Algebra, Object-Oriented Programming, Computer Hardware and Embedded Systems, DevOps
  - Composed practice and review materials to prepare juniors for major programming lab tests
- Volunteer Lead at Ground-Up Initiative** Aug 2019 – Sept 2022
- Led and coordinated volunteer participation in the flagship weekend programme, "Balik Kampung"
  - Administered digital workflows for volunteer management, knowledge sharing and social media campaigning

## Skills

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