

Experience

Software Engineer at Shopee	Sep 2024 – Present
Software Engineer at Knovel Engineering	Jan 2024 – Aug 2024
<ul style="list-style-type: none">Developed browser extensions for dynamic web scraping with LLMs and automated remote browser tasks with PuppeteerDeployed a full-stack applications (LLM chatbot, legal case assessment software) to private and public cloud platformsIntegrated and benchmarked third-party and open source AI solutions for speech transcription and speaker diarization	
Software Engineering Intern at Fabrica.AI	Oct 2022 – Apr 2023
<ul style="list-style-type: none">Developed self-hosted CI/CD workflow for building, testing and deploying Robot Operating System (ROS) software with JenkinsImplemented build systems, Makefiles and dotfile configurations to enhance developer productivity	
Software Engineering Intern at LUMIQ	Jun 2022 – Aug 2022
<ul style="list-style-type: none">Migrated self-managed plugins to support new Kubernetes versions on AWS EKSDeployed a Google Apps Script add-on as a proof of concept to make portfolio optimizer features accessible from Google Sheets	
Software Engineering Intern at Netatech Engineering	May 2021 – Aug 2021
<ul style="list-style-type: none">Implemented resource usage, irrigation schedule and environmental sensor data visualizations for indoor farms with Plotly.jsDeployed serverless functions for remote device control with MQTT and AWS IoT Core	

Education

Singapore Management University	
<i>BSc Computer Science (Artificial Intelligence Track)</i>	Aug 2019 – Dec 2023
<ul style="list-style-type: none">GPA: 3.7 / 4 (Magna Cum Laude)Recipient of SCIS (School of Computing and Information Systems) Achievements scholarshipDean's List: AY2019-2020 (Year 1), AY2020-2021 (Year 2)	

Projects

<u>CoastalClear</u>	Jun 2024
<ul style="list-style-type: none">Web application that uses historical data and volunteer bookings to coordinate volunteer cleanup effortsNominated as a finalist among 19 teams and underwent further development in an accelerator round	
<u>ScamSword</u>	May 2023
<ul style="list-style-type: none">Prototyped proof-of-concepts for scam-prevention measures in collaboration with Open Government Products (OGP)<i>Site inspect</i> analyzes URL, website DOM, and favicon to generate a comprehensive risk report<i>Scam chat</i> feature facilitates anonymous chat sessions through Telegram APIs	
<u>SourC-VM</u>	May 2023
<ul style="list-style-type: none">Compiler and virtual machine that targets a subset of the C programming languageSupports compilation errors, type-checking, conditionals, loops, and stack and heap visualizations for debugging	
<u>Spend Transactions</u>	Nov 2021
<ul style="list-style-type: none">Full-stack web application that ingests transactions, processes rewards for credit card expenditure and displays them to usersConducted automated infrastructure provisioning with CloudFormation and build releases with Github Actions	

Activities

Volunteer at Better.SG	Aug 2022 - Present
<ul style="list-style-type: none">Providing tech helpdesk and consulting services for nonprofits looking to improve digital workflows	
Teaching Roles at Singapore Management University	Jan 2021 – Dec 2022
<ul style="list-style-type: none">Courses: Linear Algebra, Object-Oriented Programming, Computer Hardware and Embedded Systems, DevOpsComposed practice and review materials to prepare juniors for major programming lab tests	
Volunteer Lead at Ground-Up Initiative	Aug 2019 – Sept 2022
<ul style="list-style-type: none">Led and coordinated volunteer efforts in the flagship weekend programme, “Balik Kampung”Administered digital workflows for volunteer management, knowledge sharing and social media campaigning	

Skills

Languages:	English, Mandarin (All Native)	
Programming:	Web (frontend):	HTML, CSS, ReactJS, Bootstrap
	Web (backend):	Spring, FastAPI, Flask, NodeJS, ASP.NET, Kafka, Redis
	Data:	RDBMS (MySQL, Postgres), DynamoDB, Hadoop/HDFS, Spark, Flink
	DevOps:	Docker, Kubernetes, AWS, Google Cloud, Azure, Terraform, Gitlab CI, Jenkins
	Data Science & ML	Pandas, Numpy, Jupyter, Tensorflow, Pytorch
	Other:	Git, Bash, Linux/UNIX, LaTeX