

Experience

- Software Engineer at Shopee** Sep 2024 – Present
- Working on Data Infrastructure Scheduler team to ensure critical data workflows meet service level agreements
 - Writing technical design documents, developer documentation and user guides for API consumers
- Software Engineer at Knovel Engineering** Jan 2024 – Aug 2024
- Developed browser extensions for dynamic web scraping with LLMs and automated remote browser tasks with Puppeteer
 - Deployed a full-stack applications (LLM chatbot, legal case assessment software) to private and public cloud platforms
 - Integrated 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
- Developed self-hosted CI/CD workflow for building, testing and deploying Robot Operating System (ROS) software with Jenkins
 - Implemented build systems, Makefiles 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 portfolio optimizer features accessible from Google Sheets
- Software Engineering Intern at Netatech Engineering** May 2021 – Aug 2021
- Implemented resource usage, irrigation schedule and environmental sensor data visualizations for indoor farms with Plotly.js
 - Deployed serverless functions for remote device control with MQTT and AWS IoT Core

Education

- Singapore Management University** Aug 2019 – Dec 2023
BSc Computer Science (Artificial Intelligence Track)
- 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

- CoastalClear** ([Github](#)) Jun 2024
- Web application that uses historical data and volunteer bookings to coordinate volunteer cleanup efforts
 - Nominated as a finalist among 19 teams and underwent further development in an accelerator round
- ScamSword** ([Github](#)) May 2023
- Prototyped proof-of-concepts for scam-prevention measures 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** ([Github](#)) May 2023
- Compiler and virtual machine that targets a subset of the C programming language
 - Supports compilation errors, type-checking, conditionals, loops, and stack and heap visualizations for debugging
- Spend Transactions** ([Github](#)) 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

- 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 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