

Singapore

National University of Singapore

Aug 2020 - May 2024

- **Major:** Computer Science
 - **Notable Programming Coursework:** Software Engineering on Modern Application Platforms (CS3217), Software Product Engineering for Digital Markets (CS3216) (A+), Programming Methodology II (A+);
 - **Teaching Assistant:** CS2030S Programming Methodology II (teaching feedback score: 4.7/5.0)

EXPERIENCE

Frontend Engineer / AI Agent Engineer

Tiktok, Trust and Safety (2024 Spot Bonus)

July2024-Present

- Architected and pioneered a multi-agent AIM (AI moderator) system, achieving >90% accuracy in content moderation across multiple policy titles, and developed a translation context engineering workflow that delivered >\$30+ million in immediate cost savings.
 - Developed AI agent benchmarking and testing platform that cut benchmarking time from weeks to 1-2 days, and created AIM policy agents that eliminated >13 days of manual CoT data generation for AI moderators while enabling self-serving capabilities for non-engineering stakeholders.
 - Led an internal group that delivers latest AI news/techniques to the department as an AI solution advocate, introducing cutting-edge collaborative canvas editing concepts, and automatic AI workflow generation that drove adoption across multiple policy business lines, establishing AI-first end-to-end systems.

iOS Software Engineer Intern

Tiktok, Instant Messaging

Mar-Aug 2023

- Worked on various optimization and refactoring initiatives such as improving media upload concurrency, which led to a relative upload latency reduction by up to 50%, thereby enhancing user experience.
 - Steered the completion of 3 feature tasks with varying levels of complexity, contributed to bug fixes on IM and provided comprehensive technical solutions and long term plans for future development.
 - Leveraged knowledge in Software Engineering Principles, Objective C, MVVM and MVP design patterns

Frontend Engineer Intern

Bytedance, Global Payments

May-Aug 2022

- Creator behind an internal frontend framework “`arco-admin`,” responsible for reducing implementation costs by more than 30%. The framework is now adopted across multiple internal B2B payment platforms.
 - Established a BFF layer, enabling efficient frontend interactions with REST and RPC-based microservices.
 - Entrusted with the holistic tech design and frontend development of the Most Viable Product (MVP) for an internal compliance risk control platform, showcasing the effectiveness of “`arco-admin`”.
 - Leveraged knowledge in TypeScript, React, Gulu, Koa, Jupiter, Arco Design, BFF Design Pattern, Golang

SOFTWARE PROJECTS

Climbijos - 21st STePS Best Project Award

- Designed frontend architecture, JWT authentication system along with several other key components using React TypeScript, React-Redux, NestJS, AWS, Cloudflare, and PostgreSQL.

DigitalAce: an all-in-one business management software

- Established a robust, cloud-based platform that seamlessly brings together key business processes, providing business owners with a holistic management system.
 - Designed and implemented unified Employee, Inventory, and Payroll management systems.
 - Utilized in React TypeScript, React-Redux, Django REST, Docker, NGINX, AWS.

NativeSay - Winner of Hack&Roll 2023

- Led a team of three in ideating, collecting user requirements, designing, and implementing the project.
 - Orchestrated the backend to provide translation endpoints, ensuring a high level of accuracy and consistency through precise engineering.
 - Utilized Django REST Framework, GPT-3, NextJS, Typescript

PUBLICATIONS

Visualizing Environments of Modern Scripting Languages

- Co-authored and presented a seminal paper, 'Visualizing Environments of Modern Scripting Languages', at the esteemed CSEDU Conference 2023 in Prague.
 - Successfully captivated the attention of Tampere University, leading to their interest in utilizing our visualization tool for their introductory courses.

SKILLS

(proficient): Python, TypeScript, React, React-Redux, HTML/CSS, Material UI, NextJS, Golang, Objective-C, Swift