

Ng Chin Chia

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EDUCATION

University of Wollongong, Bachelor Degree of Computer Science Cyber Security

TECHNICAL SKILLS

Programming Languages & Markup: JavaScript (ES6+), TypeScript, HTML5, CSS, Tailwind

Frameworks/Libraries: React.js, Node.js, Express.js, Feathers.js, React Native (Expo), Zustand, Material UI

Databases: MySQL, MongoDB, PostgreSQL

Developer Tools: Git, GitHub, GitLab, Postman, Insomnia

Cloud/DevOps/Containerization: AWS, Vercel, Docker, Podman, Nginx

Networking, Protocols & Messaging: Kafka, HTTP/HTTPS, DNS, REST, OAuth 2.0, JWT, SSL/TLS

Software Architecture: Microservices, Distributed Systems, N-tier Architecture

Operating Systems & CLI Tools: Linux, Bash, Vim

WORK EXPERIENCES

ST Engineering

May 2025 - Present

Software Engineer

- Resolved a high-severity **distributed system** production bug impacting mission-critical workflows by debugging **kafka** propagation failures in inter-systems using **Node.js**, restoring **100%** cross-system data consistency in **3** interconnected systems.
- Rectified **20+ S1/S2 production incidents** by diagnosing **state-handling** bugs in **React.js** and **event-driven** failures in distributed systems, preventing data losses and workflow disruptions.
- Reconciled cross-system analytics discrepancies in production via **MongoDB** session-scoped **multi-document transactions**, restoring **100%** accuracy with **fail-fast** validation and **atomic rollback** guarantees.
- Maintained **Linux** production systems that supported **35,000+** users via **Podman** container-runtime diagnostics, **bugfix deployments** with rollback controls.
- Led root-cause analysis of a **MongoDB** query bottleneck, deployed a compound **multikey index** that reduced users visible latency from **~16s** to **~2s**.

Mlion Corporation Pte Ltd

Nov 2024 - Mar 2025

Software Engineer

- Refactored a monolithic **Node.js** backend into a modular **N-tier architecture**, reducing deployment cycle time by **33%** through improved service separation and debugging isolation.
- Enhanced **API performance** by reducing **MySQL** query **p95 latency** by **50%** through **eager loading** and elimination of **N+1 query** across high-traffic endpoints.

Nanyang Technological University LKCMedicine

Apr 2024 - Aug 2024

Software Engineer

- Built a **full-stack** EMR simulator using **React.js**, **Node.js** within **4 months**, supporting **167** concurrent users and accelerating project delivery by **33%** through iterative development and scoped feature prioritization.
- Optimized **frontend performance** for global users, leveraging **CDN** delivery using **AWS Cloudfront**, route-level **code splitting**, and **dynamic imports**, reducing initial page load time.
- Implemented infrastructure as code using **AWS CDK** to provision cloud resources, reducing manual configuration errors.

PROJECTS

Beer Discovery Mobile App

- Led end-to-end **full-stack development** of a beer discovery mobile application using **React Native Expo**, delivering approximately **80% of the final-year capstone project codebase**.
- Designed and implemented **RESTful APIs** and **CRUD** using **Express.js** and **Mongoose** to support core features including beer discoveries, user reviews, wishlists.