



MARCUS LOI MING HAN

SOFTWARE ENGINEER | SYSTEMS & APPLICATION DEVELOPMENT

Software engineer focused on dependable application and systems development. Peers have sought me out to review unclear logic, test assumptions, and explain cleaner approaches. I move from making a solution work to understanding why, improving efficiency, and testing what breaks, and seek an entry-level role where that discipline supports practical delivery.

loiminghan08@gmail.com [018-329 2468](tel:018-329 2468) [Kuala Lumpur, Malaysia](https://www.google.com/maps/place/Kuala+Lumpur,+Malaysia) [linkedin.com/in/loi-ming-han](https://www.linkedin.com/in/loi-ming-han) github.com/McloiGG

TECHNICAL FOCUS

Systems & Low-Level Development

C and C++ work involving memory, concurrency, UNIX processes, networking, graphics, and client-server systems.

Application & Web Development

Python and Dart for responsive applications; JavaScript, TypeScript, HTML, and CSS for web interfaces.

Testing & Debugging

Edge-case design, memory/thread analysis, responsive device testing, and defensive cleanup.

AI-Enabled Applications

Reference matching and converting technical scores into feedback users can understand and act on.

Review & Delivery

Peer code review and defence, requirements validation, iterative feedback, and deployment.

TOOLS & FRAMEWORKS

Git GitHub Linux Flutter
Flask Figma Vercel Render
Valgrind Helgrind

ENGINEERING PRACTICES

- **Requirements clarification:** turns uncertain requirements into testable components.
- **Technical communication:** communicates intended behaviour before code-level details.
- **Code review & collaboration:** questions assumptions and revises decisions from evidence.
- **Systematic debugging:** traces symptoms back to assumptions and failure paths.
- **Delivery coordination:** narrows scope, assigns roles, and presents decisions.

LANGUAGES

English
Malay
Mandarin

01 WORK EXPERIENCE

- **Clinic eDoc | Pre-release clinic-management platform UI/UX & Frontend Development Intern** Nov 2023 - Mar 2024
 - Developed five Flutter screens/components in a 3-person team.
 - Integrated a device-camera plugin for the clinic app's check-in system, designed responsive Figma concepts, connected screens to mock data, and used Git/GitHub.
 - Enabled developers to validate responsive behaviour on two physical Android devices and in browser device configurations.

02 EDUCATION

- **42 Kuala Lumpur by Sunway Education Group Common Core Programme | Computer Science** May 2025 - Present
 - Completed 15 projects spanning C, C++, algorithms, UNIX processes, graphics, networking, containers, and client-server systems.
 - Participated in 124 structured peer code reviews and defences as evaluator and candidate, reviewing code, defending decisions, and improving explanations and coding practices through feedback.
- **Multimedia University (MMU) Foundation in Computing | Faculty of Computing & Informatics** Mar 2024 - Feb 2025
 - Earned Dean's List honours in recognition of outstanding academic performance.
 - Team leader for a 5-person business project, coordinating roles from product preparation through promotion and presentation.

03 SELECTED PROJECTS

- **Seekphony | Python | Full-Stack AI-Enabled Audio Evaluation**
Deployed the frontend on Vercel and Python backend on Render in a 2-person team. Designed a reference-matching flow that turns similarity scores into feedback users can understand and act on.
- **Cub3D | C | Raycasting Game**
Completed mandatory and bonus requirements in a 2-person team. Implemented defensive map parsing with masks and flood-fill checks across 42 test maps to reject malformed layouts before graphics initialisation.
- **Philosophers | C | Concurrent Systems**
Implemented mandatory thread and bonus process variants with mutex/semaphore synchronisation, defensive cleanup, and precision-aware timing. Stress-tested up to 200 philosophers and passed Valgrind, Helgrind, and ThreadSanitizer checks.

04 CERTIFICATIONS & AWARDS

- **K-Youth x 42 Malaysia 2026** Jul 2026
Khazanah Nasional Berhad & 42 Malaysia
Selected through interview as 1 of 24 participants for four weeks of team-based AI development. Progressed in a 2-person team from preparatory Python mini-programmes to a resume skill-gap analyser and a deployed full-stack audio evaluator, with three peer-review cycles, three presentations, and final staff/facilitator defences.
- **Goofiest Game Award | Great Game Jam 2026**
Won among 12 submissions over four days; shaped the concept and sound effects, then focused the 4-person team on a comedic core idea under deadline.
- **Dean's List Award | MMU 2025**