# Amirul Azizol

(+60) 12-483 2940 | amirulazizol.dev@gmail.com | linkedin.com/in/amirulazizol | github.com/brightcosmo | amirul.dev

#### EDUCATION

#### Monash University

Subang Jaya, Selangor Feb. 2022 – Jan. 2025

Bachelor of Computer Science

- CGPA: 3.9 WAM: 87.1 Recipient of Monash High Achiever Award (top 1% of cohort)
- Majoring in Advanced Computer Science, with a minor in Cybersecurity

#### EXPERIENCE

#### Wavelet Solutions

Subang Jaya, Selangor

Jan. 2024 - Dec. 2024

Software Engineer (Internship / Freelance)

- Interned from January to July, and worked on a remote freelance basis from July to December
- Developed new frontend features and fixed bugs in Flutter + Dart (mobile), and Angular + NGRX (web).
- Utilized AWS for scaling and deployment of the applications.
- Engineered and maintained various CRUD RESTful APIs for frontend features and bug fixes.
- Executed a major data migration project from MySQL to PostgreSQL. Built and ran multiple ETL pipelines.

# Monash University

Subang Jaya, Selangor Feb. 2023 – Dec. 2024

Teaching Assistant

- Teaching Assistant for FIT2014: Theory of Computation (2024).
- Tutor for FIT1045: Introduction to Programming (2023).

#### Western Digital

Subang Jaya, Selangor Nov. 2023 – Jan. 2024

Firmware Engineer (Internship)

- Designed, developed, tested, and maintained eHDD firmware using agile methodologies.
- Collaborated with the Host Interface scrum team to lower rolling average bugs per sprint by 21%.
- Resolved multiple high-priority bugs for major Fortune 500 companies.

# Projects

# RAG for Medical VQA | Transformers, Langehain, Computer Vision

Jul. 2024 – Jan 2025

- Final year research project at Monash University.
- A custom multimodal LLM tailored to answering medical and forensics questions with an RAG.
- Uses a fine tuned variant of the mPLUG-Owl3 model with a hybrid retrieval mechanism
- For RAG uploads, utilizes Gemini for contextualizing and summarizing documents.

# $\mathbf{RxNet} \mid \mathit{React.js}, \mathit{Solana}$

- 6th place winner of Monash Hackfest.
- A blockchain-powered prescription management tool to streamline processes and reduce fraud.

# $\mathbf{DocGPT} \mid Python, \ OpenAI$

• Developed an accessibility-focused LLM-powered healthcare chatbot. Designed to provide patients with a preliminary diagnosis via text, image or audio prompts, and allows them to view nearby clinics.

#### Ren | Flutter, Dart

- Top 10 Finalist for Kitahack 2024.
- A volunteer cleaning app inspired by poor waste management practices.

# Vital Vision | Image Processing

• An image processing application to detect users' heart rates without special equipment.

### Technical Skills

Languages: Python, Java, JavaScript/TypeScript, Dart, Go, C/C++, SQL (Postgres), HTML/CSS, R Technologies: Angular, React.js, Node.js, Next.js, Flutter, Spring Boot, FastAPI, Jenkins, AWS, MongoDB

**Tools**: Git, Docker, VS Code, Postman, GitHub, BitBucket, Jira, Tableau **Spoken Languages**: Native fluency in English and Bahasa Melayu