

Amirul Azizol

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EDUCATION

Monash University

Subang Jaya, Malaysia

Bachelor of Computer Science, Major in Advanced CS, Minor in Cybersecurity

Feb. 2022 – Dec. 2024

- GPA: 3.92 — WAM: 87.1
- Recipient of Monash High Achiever Award (top 1% of cohort) and Industry Based Learning scholarship
- **Relevant Coursework:** Data Structures & Algorithms, Object Oriented Programming, Functional Programming, Software Engineering Process & Management, Databases, Data Visualization, Parallel Computing, Cybersecurity

EXPERIENCE

Machine Learning Engineer

Apr. 2025 – Present

TransPerfect

Singapore

- Categorized, audited, and optimized lexical data for the Malay language.
- Developed and trained natural language processing models tailored to the Malay language.

Teaching Assistant

Jan. 2023 – Dec. 2024

Monash University

Subang Jaya, Malaysia

- TA and marker for FIT2014 (Theory of Computation) in 2024 and FIT1045 (Intro to Programming) in 2023.

Technology Consultant Intern

Jun. 2024 – Jul. 2024

Monash Warwick Alliance

Subang Jaya, Malaysia

- Led a global, cross-functional team of students to improve technical infrastructure for a local tutoring company.
- Built a learning management system prototype, a redesigned website UI, and an automatic e-invoicing tool.

Software Engineer Intern

Jan. 2024 – Jun. 2024

Wavelet Solutions

Subang Jaya, Malaysia

- Developed, tested, and deployed a major general UI setting applied to 10+ applets in production.
- Refactored a Flutter mobile app to improve overall performance, cutting image and video load times by half.
- Built queue tables and job processors to migrate millions of records from legacy systems to a datalake.
- Performed 20+ micro-frontend deployments, utilizing AWS services such as S3 and Lambda.
- Updated and maintained various CRUD RESTful APIs using Java with Spring Boot.

Firmware Engineer Intern

Nov. 2023 – Jan. 2024

Western Digital

Subang Jaya, Malaysia

- Developed and maintained eHDD firmware using unit testing, CI pipelines, and agile methodologies.
- Resolved high priority bugs, including technical investigations and failure analysis on firmware problems.
- Reduced the average bugs per sprint by 21% for the host interface team.

PROJECTS

RAG-Enhanced LLM for VQA | *Computer Vision, Langchain, Transformers*

July 2024 – Jan. 2025

- **Final year project.**
- A custom multimodal LLM for answering medical and forensics questions with retrieval-augmented generation.
- Fine-tuned the mPLUG-Owl3 model with a hybrid retrieval mechanism (cosine similarity and full-text matching).
- For RAG uploads, uses a custom chunking algorithm with Gemini for contextualizing and summarizing texts.

RxNet | *React.js, Solana*

July 2024 - Aug. 2024

- **Finalist at APU Devmatch 2024 and 6th place winner of Monash Hackfest 2024.**
- A blockchain-powered prescription management tool to streamline processes and reduce fraud.

Ren | *Flutter, Dart*

Dec. 2023 - Jan. 2024

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

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

Libraries: Pandas, Numpy, Transformers, Langchain