Amirul Azizol

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EDUCATION

Monash University   Subang Jaya, Malaysia
Bachelor of Computer Science, Major in Algorithms and Software, Minor in Cybersecurity   *Feb. 2022 – Mar. 2025*
- GPA: 3.92 — WAM: 87.1 — Recipient of Monash High Achiever Award (top 1% of cohort)
- **Selected Coursework:** Data Structures and Algorithms, Object Oriented Programming, Cybersecurity, Functional Programming, Databases, Parallel Computing

EXPERIENCE

TransPerfect   Singapore
Machine Learning Engineer   *Apr. 2025 – Present*
- Created, categorized, audited, and optimized lexical data for the Malay language.
- Developed natural language processing models tailored to the Malay language.

Wavelet Solutions   Subang Jaya, Malaysia
Software Engineer (Internship / Freelance)   *Jan. 2024 – Dec. 2024*
- Interned from January to July, and worked on a remote freelance basis from July to December.
- Built frontend features and resolved bugs in Flutter (mobile) and Angular + NGRX (web).
- Utilized AWS services such as EC2, S3, RDS, and Lambda to efficiently scale and deploy 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, Malaysia
Teaching Assistant   *Feb. 2023 – Dec. 2024*
- Teaching Assistant for FIT2014: Theory of Computation (2024).
- Tutor for FIT1045: Introduction to Programming (2023).

Western Digital   Subang Jaya, Malaysia
Firmware Engineer (Internship)   *Nov. 2023 – Jan. 2024*
- Developed and maintained eHDD firmware through unit testing, continuous integration, and agile methodologies.
- Worked in the Host Interface team, where I reduced the average number of bugs per sprint by 21%.
- Resolved multiple high-priority bugs for major Fortune 500 companies.

PROJECTS

Final Year Research Project | *Computer Vision, Langchain, Transformers*   July 2024 – Jan. 2025
- 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.

DocGPT | *Python, OpenAI*   June 2024 - July 2024
- A multimodal medical LLM, designed to improve healthcare accessibility and streamline patient triage processes.
- Includes integration with Google Maps API to display nearby clinics for patient convenience.

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