Tan Zi Fung

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Portfolio: zfung14.github.io/DigitalPortfolio/ | Phone: +61428113226 | Location: Perth, WA

PROFILE

Aspiring software developer and data analyst with hands-on experience in full-stack web development, data engineering, and statistical modelling. Proficient in Python, Java, SQL, and R with a strong track record of delivering impactful projects in healthcare, government analytics, and media. Known for strong teamwork, problem-solving, and leadership as President of a student society. Passionate about building practical solutions that improve daily life and support data-driven decision-making.

EDUCATION AND QUALIFICATION

Bachelor of Science (Computer Science and Data Science)   **Feb 2024 - Present**

The University of Western Australia, Australia

Due to complete course in Nov 2025

PROJECTS

1. **Soul Maps**
   A full-stack media tracking and sharing platform that visualizes user media habits through interactive dashboards.
   - Built with Flask, Python, SQLAlchemy, HTML/CSS, Chart.js, and JavaScript.
   - Implemented user authentication, dynamic forms, and data visualizations to track books, movies, TV shows, and music.
   - Designed and integrated polymorphic models and REST-like routes to handle multiple media types.
   - Collaborated with 3 team members using GitHub and Agile workflow to manage sprints, issues, and pull requests.
   - GitHub Repository: https://github.com/fudgeg/SoulMaps

2. **Medix**
   A desktop-based EMR system that simulates hospital workflows with secure, role-based access for doctors and patients.
   - Built using Java, JavaFX, FXML, and Java Object Serialization with MVC architecture.
   - Implemented role-based login and dynamic dashboards tailored to user roles.
   - Designed modular, serializable data models to track appointments, diagnoses, and lab records.
   - GitHub Repository: https://github.com/ZFUNG14/Medix

3. **Road Safety Data Warehouse**
   A dimensional modelling and analytics project using Australia fatal crash data from 1989 until 2024 to support public policy decisions.
   - Designed a star schema with fact and dimension tables using Kimball's methodology.
   - Built ETL pipeline in Python to load crash data into a PostgreSQL warehouse.
   - Created Tableau dashboards and mined association rules to uncover crash patterns.
   - Full Report: https://github.com/ZFUNG14/DataWarehouseDesign

4. **Low Birth Weight Predictor**

A statistical modelling project predicting the likelihood of low birth weight in newborns using clinical and behavioural data.

- Built and refined logistic regression models in R with stepwise selection using `stepAIC()`.
- Performed data cleaning, encoding, and exploratory analysis on maternal health variables.
- Incorporated interaction terms to improve model fit and interpretability.
- Full Report: https://github.com/ZFUNG14/LowBirthWeightwithLogisticRegression

Technical Skills

- **Programming Languages**: Python, Java, C, C++, C#, R, SQL, JavaScript, Bash/Shell
- **Web & Application Development**: Flask, HTML & CSS, JavaFX, Jinja2
- **Data Science & Analytics**: NumPy, Pandas, RStudio, Tableau, Jupyter Notebook, SQL
- **Database & Data Engineering**: PostgreSQL, Neo4j (Cypher), Docker, Bash scripting
- **Version Control & Tools**: Git, GitHub, VS Code, Markdown, Notion, Obsidian
- **UI/UX & Visualization**: Tableau, Figma
- **Other Technologies**: Docker, Linux CLI, Shell Scripting

EXTRACURRICULAR ACTIVITIES

President   **Jan 2025 – Present**

Malaysia Cultural Society UWA

- Lead and manage a team of 50 people to plan, organize, promote, as well as execute cultural and social events for 300+ people, fostering a sense of community on campus.
- Oversee all society operations, including budget management and collaboration with university administration and external partner to ensure successful events.
- Increased events attendance by over 70% year-over-year through improved outreach and event planning.

OTHER EXPERIENCE

Permanent Part Time Team Member   **Mar 2023 - Dec 2023**

Cotton On Group

- Provided exceptional customer service, ensuring a unique and memorable shopping experience for every customer.
- Collaborated with team members to acquire common goals and embraced challenges as opportunities for personal and professional growth.

REFEREES

Amitava Datta		Darfiana Nur		Available on request
CITS2002 Unit Coordinator	OR	STAT2402 Unit Coordinator	OR	
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amitava.datta@uwa.edu.au		darfiana.nur@uwa.edu.au		