

Education

University of Sydney – Credit WAM
Bachelor of Software Engineer (Honours)
Georgia Perimeter College – 3.68 GPA
Associate's Degree in Computer Science

Sydney, Australia
2023 – Present
Georgia, Atlanta
2020 – 2022

Work Experience

PT Bangunan Jaya Cemerlang

Date: June 2024 - Dec 2024

- Managed database operations on the Ginee platform, overseeing updates for product stock, pricing, and inventory across a catalog of over 1,000 SKUs.
- Resolved product synchronization issues between online and offline stores by optimizing the data entry process, reducing operational delays by 50%.
- Led cross-category expansion** efforts, integrating new product categories into the Ginee database using **SQL scripts**, resulting in a 40% increase in catalog size and expanded sales opportunities across multiple e-commerce channels.
- Automated inventory updates using Ginee's bulk-editing tools, cutting manual errors by 25% and saving over 10 hours per week in data management tasks.

Projects

ML Predictor Model for Lung Cancer Survivability

Utilities: Python, Scikitlearn,, Jupyter Notebooks, Pandas, Matplotlib

- Built a logistic regression model achieving 83.7% accuracy in predicting lung cancer survivability, improving baseline performance by 20% through feature engineering and dataset balancing.
- Preprocessed and cleaned a dataset of 50,000 patient records, addressing issues such as missing data, imbalanced classes, and irrelevant features to enhance model robustness.
- Developed a scalable pipeline for data preprocessing, including date feature transformations, one-hot encoding for categorical variables, and numerical standardisation using StandardScaler.
- Optimised the model with gradient descent and regularisation techniques, achieving a ROC-AUC of 0.88 and balanced F1-scores exceeding 0.80 across survival classes.
- Conducted performance evaluation using metrics such as precision (78%), recall (95%), and confusion matrices to validate model reliability for clinical use.
- Collaborated with a multidisciplinary team of 4 engineers to deliver a machine learning solution aimed at improving personalised treatment planning in lung cancer care.

Airline Database SQL

Utilities: SQL, HTML & CSS, Python

- Designed and implemented a relational database schema for an airline reservation system, ensuring data normalization and optimal query performance.
- Built intuitive web interfaces using HTML & CSS, enabling users to search for flights, add/remove flights, and manage admin vs user access through role-based access control
- Automated backend operations using Python, including scheduled updates for flight statuses and data synchronization.
- Conducted rigorous testing of SQL scripts to ensure data integrity and robustness under high-volume scenarios.
- Analysed database security flaws from SQL injection and other security threats

Pacman Game

Utilities: Java, JavaFX, Gradle, Junit

- Developed a dynamic Pacman game featuring visually engaging gameplay, with over 100 custom UI elements and animations, using JavaFX for both interface design and core logic.
- Designed and implemented keyboard-based controls with the Command Pattern, ensuring responsive player movements with an input latency of less than 50 milliseconds.
- Utilized the Factory Pattern to generate over 5 distinct game entities (e.g., Pacman, ghosts, power-ups), enhancing game variety and replayability.
- Structured the codebase with SOLID and GRASP principles, reducing technical debt by 30% and improving maintainability for future iterations.
- Programmed target lock behavior for ghosts with multiple difficulty levels, delivering a balanced challenge across 3 progressive game modes.

Technical Skills

Proficient: Java, Python, SQL

Familiar: Scikitlearn, Pandas, NumPy, C, Unity2D, Javascript (React), C#