Sherry (Zonghui) Shan

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SUMMARY

- Final-year Master of IT student at the University of Melbourne seeking a web development or data visualization internship.
- Hands-on experience in Python, data analysis, and interactive and interactive web mapping using large public datasets.
- Skilled in cleaning, transforming, and analyzing datasets to build interactive visualization platforms and data-driven applications.
- Strong team collaborator with experience in Agile delivery, technical documentation, and project delivery and reporting.

SKILLS

Programming: Python, JavaScript, TypeScript, Java, SQL, HTML, CSS
Data Analysis & Spatial Visualization: Python, Pandas, NumPy, Data Cleaning, Exploratory Data Analysis (EDA), Data Visualization, Interactive Mapping, WP Go Maps
Frontend: React, Vite, WordPress, Tailwind CSS, Data Visualization, Responsive UI Design, SVG Graphics
Backend & Database: Node.js, REST APIs, Django/Flask basics, MySQL, PostgreSQL, BigQuery
Tools & Workflow: Git, GitHub, Microsoft Excel (Intermediate), Jupyter Notebook, Agile Collaboration, Technical Documentation

PROJECT EXPERIENCE

LevelLens Assessment Review Platform
Full-stack Developer / Documentation & Project Coordinator | Mar 2026 – Jun 2026
- Built and integrated backend REST API endpoints to support key UI workflows, including submission review, exam version comparison, report navigation, and rule-based suggestion generation.
- Refactored the frontend from an older Vue implementation to a modern React 19 + Vite architecture, restructuring pages into feature-based modules and reusable UI components to improve maintainability and development efficiency.
- Worked with teammates throughout development by preparing technical documentation, release notes, test evidence, and project documentation using GitHub.

Urban Tree Cover Explorer
Spatial Data Visualization & Interactive Mapping Platform | Mar 2025 – Jun 2025
- Developed an interactive spatial data visualization platform using WordPress and WP Go Maps to explore the City of Melbourne Urban Forest dataset supporting map-based exploration of tree locations, species groups, maturity status, and nearby landmarks.
- Built an automated Python data processing pipeline to clean, transform, and convert 82,064 spatial records into WP Go Maps-compatible marker data, significantly reducing manual processing effort and improving data maintainability.
- Designed and integrated AI-assisted custom SVG map markers representing different tree categories, enhancing visual interpretation and usability of large-scale spatial datasets.
- Implemented spatial filtering and querying features based on distance, tree species, and maturity status, enabling efficient exploration and location-based analysis of urban tree coverage.
- Added custom and user-generated map markers for significant locations, supporting interactive location planning and demonstrating practical application of spatial data systems.

AKI Mortality Prediction Using MIMIC-IV
Clinical Data Preprocessing / Machine Learning Project | Academic Project
- Defined an AKI patient cohort from MIMIC-IV using BigQuery, integrating ICU stay details, KDIGO AKI stages, severity scores, labs, vital signs, blood gas values, and comorbidity variables.
- Built a reproducible Python preprocessing pipeline covering cohort cleaning, missing value imputation, outlier handling, log transformation, normalization, categorical encoding, and model-ready dataset generation.
- Analyzed a cohort of 61,742 ICU stays using exploratory data analysis, correlation analysis, and principal component analysis to prepare data for predictive modelling.

Nutrition5K Calorie Estimation Model
Computer Vision & Data Processing Project | Academic Project
- Built a Python and PyTorch pipeline to preprocess 3,086 RGB-D food image records, covering data loading, augmentation, label normalization, and model preparation.
- Processed and validated 3,086 food image records using an automated workflow with an 80/20 train-validation split, supporting reproducible machine learning experiments.
- Evaluated RGB and RGB-D models, with the final fusion model improving validation MAE from 69.7 kcal to 59.6 kcal.

EDUCATION

The University of Melbourne — Master of Information Technology
Melbourne, VIC | Jul 2024 – Present

INTERESTS

- Outdoor and water activities, including free diving, scuba diving, swimming, snorkeling, camping, crab fishing, and river fishing.
- Recreational sports and lifestyle interests, including badminton, table tennis, cooking, and baking.