DAVE VU

Data Analyst | Insurance & Actuarial Analytics

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SUMMARY

Data analyst focused on insurance and actuarial analytics, building end-to-end Python, SQL and Power BI projects on Australian insurance data. Completing a Master of Computing (Computer Science) at Curtin University and studying for the IFoA CS1 Actuarial Statistics exam. Brings hands-on experience in inventory, fleet maintenance and IT support, and uses AI tools such as Claude Code and Cursor to work faster while independently validating every result against source data.

PROJECTS

Australian Natural Catastrophe Insurance Loss Analysis | Python, SQLite, statsmodels, SciPy *Personal project, 2026*

- Built a reproducible pipeline cleaning 743 Insurance Council of Australia catastrophe events (1967–2026), deriving missing locations from postcodes, place names and an analyst-reviewed lookup to resolve 343 of 345 loss events, with six automated data quality checks.
- Separated inflation from exposure growth: reported losses rose about 50-fold since the 1970s, but only 27% once normalised for prices and exposure.
- Modelled large-event frequency with Poisson regression and compared Pareto, lognormal and truncated lognormal severity models, showing that tail model choice moves the return period of a $5bn event from 1-in-4 to 1-in-24 years.

github.com/duogvuu/australian-catastrophe-loss-analysis

Australian General Insurance Performance Dashboard | Python, SQLite, Power BI (DAX) *Personal project, 2026*

- Built a Python ETL pipeline turning 29,455 rows of APRA quarterly statistics (AASB 17) into a SQLite star schema, with automated reconciliation against 187 APRA-published subtotals.
- Designed a three-page Power BI dashboard tracking loss and combined ratios across 18 classes of business, 8 states and 11 quarters, with DAX measures that prevent double counting of state and national figures.
- Identified and fixed a bias from confidentiality-masked data that understated the industry combined ratio, and found opposite catastrophe seasons in Queensland and WA (storm-season home insurance loss ratio of 172% vs 51%).

github.com/duogvuu/apra-general-insurance-dashboard

NDIS Connect – Provider Discovery Platform | Curtin University group project (5 members) *2026*

- Led requirements specification and validation, and built frontend components for participant requirements, provider results and budget forecasting, working in Jira with feature branches in Git.

SKILLS

Data & programming: Python (pandas, NumPy, SciPy, statsmodels, matplotlib), SQL (SQLite), R (learning for IFoA CS1B)

Analytics & BI: Power BI (Power Query, DAX, star schema), Excel, data cleaning and validation, data storytelling

Statistics: Poisson regression (GLM), distribution fitting, maximum likelihood estimation, return period analysis

AI-assisted development: Claude Code, Cursor and ChatGPT for coding, debugging and documentation, with independent validation of outputs

Tools: Git and GitHub, VS Code, Jupyter, Jira, Microsoft 365, Windows support and hardware diagnostics

PROFESSIONAL EXPERIENCE

HENRI LIVING *02/2026 – Present*

Warehouse & Installations Assistant

- Brought large-item assembly and installation in-house, halving delivery lead times and replacing outsourced work estimated at $1,500–2,800 per container (5–7 large items at $300–400 each).
- Achieved a 100% first-time completion rate on installations, with no return visits required, and delivered planned work on schedule.
- Completed 6–7 custom cabinet jobs, drawing on prior cabinet-making experience.
- Maintained inventory records and coordinated scheduling and logistics with lead installers.

V4 IT SERVICES *04/2025 – 09/2025*
Desktop Support Technician

- Achieved a 100% job completion rate, resolving hardware, software and connectivity issues on-site for home and business clients in Darwin within agreed timeframes.
- Logged and tracked support requests through to resolution, keeping records of issues and fixes to speed up future troubleshooting.
- Explained technical problems and solutions in plain language to non-technical clients.

F&J BITUMEN SERVICES *04/2025 – 05/2025*
Vehicles & Parts Maintenance Coordinator

- Halved turnaround time on fleet and parts requests by taking over coordination previously handled by the accountant and other staff alongside their main duties.
- Processed 200–300 parts and maintenance orders, keeping stock levels and parts availability up to date.
- Maintained fleet records, including odometer readings, vehicle specifications and service schedules, in a web-based fleet management system.
- Built Excel reports tracking inventory, maintenance schedules and parts availability to support proactive servicing and reduce vehicle downtime.

EDUCATION

Curtin University *03/2026 – 12/2027*
Master of Computing – Computer Science major

Charles Darwin University *03/2025 – 11/2025*
Master of Data Science (coursework)

Royal Melbourne Institute of Technology (RMIT) *10/2021 – 12/2024*
Bachelor of Business – Logistics and Supply Chain Management

Institute and Faculty of Actuaries (IFoA) *In progress*
CS1 Actuarial Statistics (including CS1B in R), sitting April 2027

VOLUNTEERING & LANGUAGES

Volunteering: RDA Top End – NDIS Community Engagement (2025); CDU Student Support – Peer Assistance; AVA Festival – Event Support

Languages: English (fluent), Vietnamese (native)

REFERENCES

Available on request.