# Joshua D. Golafshan

Quantitative developer skilled in Python, statistical modeling, and real-time trading systems.

**♀** Sydney, Australia

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in LinkedIn

**O** GitHub

Portfolio

### **EDUCATION**

#### **Macquarie University**

Mar 2021 - Jul 2025

BSc in Mathematics, Minor in Statistics

Relevant Coursework: PDEs, ODEs, Numerical Methods, Linear Algebra, Probability, Statistics

 $\mathbf{QuantInsti} \qquad \qquad \mathbf{Aug} \ 2019 - \mathbf{Mar} \ 2020$ 

Algorithmic Trading Certification

Relevant Coursework: Backtesting, Strategy Development, Derivatives, Live Infrastructure

**TAFE NSW** Mar 2017 – Dec 2017

Certificate III in Engineering - Technical

#### TECHNICAL SKILLS

Programming Languages Python Java SQL MATLAB R Programming

Frameworks Flask Streamlit MySQL SQLite3

Tools Git LaTeX Microsoft Suite

**Libraries** Pandas NumPy

#### **EXPERIENCE**

#### Independent Developer – Technical Consultant / Developer

Nov 2021 - Present

- Achieved 70% client retention through strong communication and reliable delivery.
- Translated briefs into actionable milestones, bridging technical gaps with clients.
- Maintained international clients by overcoming time zones and language barriers.

#### Women's Community Shelters (Placement) – Data Scientist

Aug 2024 – Nov 2024

- Modeled the impact of women's shelters on homicide rates using a zero-inflated gamma model across all NSW LGAs from 1995 to 2024.
- Merged multi-external data sets into a unified data-set (BOCSAR, SEIFA, Shelter Data, Aboriginal population stats).
- Collaborated with government agencies (ABS, Homes NSW) to source vital data.
- Scraped and parsed shelter data with custom Python scripts.
- Presented final results using R Quarto and oral presentation to stakeholders.

# **PROJECTS**

# Financial Analysis Dashboard

Live Demo

Technologies: Python, Streamlit, MongoDB

- Developed an interactive dashboard for analyzing financial instruments using the Yahoo Finance API, attracting over 200 views.
- Implemented a Black-Scholes pricing model and Monte Carlo simulations for risk modeling.
- Used MongoDB to manage user activity and historic usage.

# REFERENCES

Available upon request.