# Nathan Shaheen

+61 0401 573 943 | nathshaheen1@gmail.com | linkedin.com/in/nathan-shaheen/ | github.com/nathshaheen | Sydney, Australia Seeking full-time Software Engineering roles, available for immediate start. References available upon request.

# Education

### **Macquarie University**

Sydney, Australia

Bachelor of Engineering (Honours) – Software Engineering

Feb. 2019 - Nov. 2024

- Department of Computing Academic Excellence Awards (2020 & 2021)
- Thesis: Driving Prediction Model Leveraging Human Attention-Based Models. Mark: Honours Class II Division 1 (H2A)
- Relevant coursework: Object-Orientated Programming, Algorithms and Data Structures, Artificial Intelligence & Machine Learning, Distributed Systems

## Experience

## **Software Engineer Intern**

June 2024 – Aug. 2024

Aubot

Sydney, Australia

- Developed and deployed features to the Learning Management System (LMS) using Java, Python and React, based on user feedback, stakeholder requirements and data analytics.
- Developed 5,500 interactive coding formats in Java and Python for the LMS alongside a team of 5 members.
- Conducted bug verification of the LMS through testing and weekly updates based on user feedback and data analysis.

## **Computing Drop-In Centre Assistant**

Feb. 2024 - June 2024

Macquarie University

- Sydney, Australia Assisted students in 1-on-1 and small group sessions, across undergraduate and postgraduate computing units.
- Taught students in units such as Fundamentals of Programming and Object-Orientated Practices, Algorithms & Data Structures, Software Engineering Principles, Low-Level Systems Programming and Web Development.

Web Developer Aug. 2019 - Feb. 2024 Self Employed Sydney, Australia

- Designed and developed full stack web apps with NodeJS, React & NextJS, for multiple local businesses.
- Leveraged Google Ads to generate more than 10,000 impressions per month and drive traffic to businesses sites.
- Communicated with clients to elicit requirements and expectations through prototyping, interviews and surveys.

## **Projects**

#### **Processing Testing Framework** – *Java, JavaFX, GitHub*

- Implemented static code analysis and code generation for the Processing programming language.
- Utilised GitHub and GitHub Actions within a CI/CD pipeline, following DevOps practices and procedures to streamline team collaboration and project management for a team of 4.
- Streamlined the marking process of 2 Macquarie University Computing, reducing time spent marking by tutors.

## Interactive Point-and-Click Web Application – React, Jest, GCP

- Developed, hosted and deployed a web application using React and GCP.
- Deployed GCP Storage to store assets and Could Caching to increase performance when loading assets.
- Implemented tests using the Jest framework to ensure feature integrity throughout development.

## Digit Classification Neural Network – Python, NumPy, Pandas, Matplotlib

- Leveraged Machine Learning techniques, NumPy and Pandas to develop a 2-layer neural network that determines digits depicted in images to an accuracy of 85.5% after 500 iterations.
- Trained and tested using the MNIST database.

## Turn-based Desktop Game – Java

- Leveraged Java's AWT, Swing and Concurrency packages to create an immersive user experience.
- Implemented strategy, iterator, and singleton design patterns to organise and improve code quality.

#### Activities

### Macquarie Association of Computing Students - Member

Feb. 2019 – Present

Attended association events to further my knowledge (Linux workshops, career events, guest speakers, etc.).

Engineers Australia – Student Member – EA ID: 8874280

Feb. 2019 - Present

Australian Computer Society - Associate - Member Number: 4405026

Mar. 2024 - Present

Skills

Languages: Java, Python, TypeScript, JavaScript, C++, HTML, CSS

Technologies: React, NextJS, NodeJS, JavaFX, Jest, Google Cloud Platform (GCP),

Google Firebase, NumPy, Pandas, WordPress

Tools: Git, GitHub, Jira, Confluence, LaTeX, Linux