

Nathan Shaheen

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Penultimate year Master of Information Technology student seeking Software Engineering Internships. References available upon request.

Education

University of New South Wales *Feb. 2025 - Nov. 2026*
Master of Information Technology *Sydney, Australia*

- Activities: Computer Science and Engineering Society (CESoc), DevSoc

Macquarie University *Feb. 2019 - Nov. 2024*
Bachelor of Engineering (Honours) - Software Engineering *Sydney, Australia*

- Awards: Department of Computing - Academic Excellence (2020 & 2021)
- Thesis: Development of Driving Prediction Machine Learning Models Leveraging Human Attention-Based Vision
- Grade: Honours Class II Division 1 (H2A)

Experience

Software Engineering Intern *Jun. 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 and stakeholder requirements.
- 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 analytics.

Computing Drop-In Centre Assistant *Feb. 2024 - Jun. 2024*
Macquarie University *Sydney, Australia*

- Assisted students 1-on-1 and in small group settings, across undergraduate and postgraduate computing units.
- Taught 100+ students across the following units: Fundamentals of Computer Science, Algorithms & Data Structures and Web Technology.

Projects

Interactive Point-and-Click Web Application *React.js, Node.js, Jest, Google Cloud Platform*

- Developed, hosted and deployed a web application using React.js, Node.js and Google Cloud Platform (GCP).
- Leveraged GCP Storage to store assets and Cloud Caching to increase performance when loading assets.
- Implemented tests using the Jest framework to ensure feature integrity throughout the development lifecycle.

Processing Testing Framework *Java, JavaFX, GitHub*

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

Digit Classification Neural Network *Python, NumPy, Pandas, Matplotlib*

- Utilised 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 of training on 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.

Skills

Languages: Java, Python, JavaScript, HTML, CSS, SCSS

Technologies and Tools: React.js, Node.js, JavaFX, Jest, Google Cloud Platform, Google Firebase, NumPy, Pandas, Matplotlib, Git, GitHub, Jira, Confluence