

# Matt Eden

## Final Year Computer Systems Engineering

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### Experience

#### University of Auckland, Teaching Assistant [↗](#)

Jul 2019 – Present | Auckland, New Zealand

- Designed programming questions in **Python** and **Java** using an online content delivery system for graded assignments
- Taught students the fundamentals of **Object-Oriented Programming** in **C++**
- Improved students' understanding of **Data Structures and Algorithms**
- Conducted student-facing drop-in labs and graded coursework for **1000 students** across three semesters

#### Teknique Ltd., Software Engineering Intern [↗](#)

Nov 2019 – Feb 2020 | Auckland, New Zealand

- Implemented a dashboard to visualise manufacturer data using **Grafana** that was adapted for production in the **United States and China**
- Modernised a legacy in-house quality assurance test suite from Python2 to **Python3**
- Performed crucial research into data visualisation solutions with **Linux** servers containerised using **Docker**
- Developed hardware and software tests with **Nose** for an in-house SDK

#### University of Auckland, Research Assistant [↗](#)

Nov 2018 – Mar 2019 | Auckland, New Zealand

- Worked with an embedded video analytics system in **OpenCV** in **C++**
- Developed a script in **Python** to generate metrics for precise and consistent evaluation

### Education

#### University of Auckland,

*Bachelor of Engineering (Hons) in Computer Systems*

Mar 2017 – Present | Auckland, New Zealand

Undergraduate degree combining Electrical Engineering and Software Engineering to create a holistic view of computers and their operations.

Final Year GPA: 8.33

### Interests

**Gōjū-Ryū Karate** (*Green Belt, 5th Kyū*), **Japanese**, **Linux** (*Arch Linux*), **Game Design**

### Projects

#### Roll for Reaction [↗](#)

Mar 2020 – Jun 2020

- A turn-based rogue-like **dungeon-crawler RPG** that takes inspiration from *Dungeons and Dragons*
- Implement using **React** and **Redux**, the game supports both desktop and mobile platforms

#### Anzen [↗](#)

May 2019 – Jun 2019

- Full-stack peer-to-peer messaging service created with **CherryPy**, using an **SQL** database and **Jinja** templating for the frontend webpages

#### Energize [↗](#)

Mar 2019 – May 2019

- A side-scrolling action adventure game in **JavaFX** with randomly generated maps and **LAN multiplayer**
- Voted **#1 Best Game** at the event it was showcased at, winning out against **100 other competitors**

### Leadership

#### University of Auckland,

*Part IV Computer Systems Representative* [↗](#)

Mar 2020 – Present

Liaising between students and lecturers to ensure the best outcome for a cohort of **100 students**.

#### Japanese Auckland Meetup, Secretary [↗](#)

Jan 2018 – Present

Managing the internal operations of the **largest Japanese language exchange club in Oceania**, with over **2000 members** across its 6 year history.

### Organisations

#### Engineering New Zealand

Apr 2018 – present

#### Gōjū-Ryū Karate Club

Mar 2018 – present

### Skills

C/C++

Python

Java

Javascript

SQL

React.js

Git

Docker