

TECHNICAL PROJECTS

WORKOUT TRACKING APP

<https://workout-app-xi.vercel.app/>

- Built a **CRUD** exercise app with responsive frontend using **React**, **HTML**, and **CSS**.
- Implemented **RESTful JSON APIs** with **Express**, **NodeJS** and the database using **MongoDB**
- **CI/CD** pipeline with staging and production environments with **Buildkite** and deployed on **Vercel**.
- Implemented functional and unit tests using **Jest**.

PERSONAL PORTFOLIO WEBSITE

<https://tim-li-portfolio.netlify.app/>

- Website designed to have a responsive UI.
- Developed with **NodeJS**, **CSS**, **HTML**, **React JS**, and **Tailwind** for the frontend.

MACHINE LEARNING PROJECTS

- Utilising **Gymnasium API** and **Python** create reinforcement learning environments.
- Trained the agent using **Python** to complete a game of Atari Pong and balance a pole on a cart.
- Used reinforcement learning on the **Nvidia Jetbot** to identify road signs while navigating a road course.

UNIVERSITY PROJECTS

- Implemented the firmware for a smart scale to communicate between hardware and software.
- Recreated Flappy Bird using an **FPGA** board with **VHDL**.
- Learned **HTML** and **CSS** to design a low and high-fidelity carbon footprint themed website.

TECHNICAL SKILLS

Frameworks and Tools:

Languages: JavaScript | Python | HTML/CSS | Java | C | VHDL

Software: React | NodeJS | MongoDB | Tailwind | Express | GitHub | Buildkite | Jest

Hardware: Altium Designer | Oscilloscopes | Quartus | LTspice

EDUCATION

The University of Auckland

Auckland, NZ

Bachelor of Engineering (Honours) in Computer Systems Engineering

VOLUNTEERING WORK

Chinese Herald

Auckland, NZ | 2016 - 2018

- Promoting and distributing sponsored merchandise during the Lantern Festival

HOBBIES/INTERESTS

Art: Passion for art at an early age, photorealism styles and architectural drawings.

Bouldering: Climbing rocks is fun.

Model kit building: Enjoy building model kits, especially Gunpla (mecha models from Japan)

Video Games: I enjoy Esports and playing games such as Tekken, Elden Ring, League of Legends.