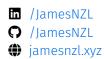
# **James Bao**

# james@jamesnzl.xyz+64 22 410 1580Auckland, New Zealand



#### **Career Objective**

I am chasing an internship to grow my love for everything from analogue electronics to full-stack web development.

I love active problem-solving, and **tinkering** around with an ever-evolving project until it is exactly right. I enjoy learning & seeing how technology can be applied to **improve human lives**—whether through software, hardware, or a **beautiful combination of both**.

I am a driven, reliable team player with proven leadership skills and a knack for effective communication. I am always looking to learn new things and grow as a person—and I apply this mindset to everything I do.

#### **☆ Skills Summary**

#### **Problem Solving**

- ➤ I am a natural problem solver, and apply my strong logical thinking to challenging situations. I leave things better than I found them, working methodically to arrive at an optimal solution.
- ➤ I have created a personnel development framework, and implemented a digital workspace to consolidate data, administration, and procedures into a single source of truth.

#### **Communication Skills**

- > I am an effective communicator with an aptitude for **breaking down challenging concepts**.
- ➤ I help appreciative first-years with **intuitive explanations** for difficult, technical concepts. I also tutored English, Maths, and Science at high school.
- ➤ I have acquired experience in presentation skills, public speaking, and self-confidence through my New Zealand Cadet Forces development courses.

#### Leadership

- ➤ I am passionate about intent-based leadership and **understanding** each member's **strengths and weaknesses**—I strongly believe the whole is greater than the sum of its parts.
- ➤ I was a Prefect and Deputy House Captain at high school, a Cadet Warrant Officer Class Two in the NZCF, and led the House Haka in Years 11–13.
- ➤ I was appointed to be the Regimental Sergeant Major for a highly successful Recruit Training Course with units from across the Upper North Island.

#### **Teamwork**

- ➤ I strive to **be an asset** to any team, and try to morph into whatever role is in demand. I am often counted on for my punctuality and reliability—I **do not make promises I cannot keep**.
- ➤ I was a member of my high school's Premier Lacrosse and Premier Target Shooting teams, and know the importance of teamwork and collective buy-in.

## **Experience Summary**

Course Cadet StaffJul 2021New Zealand Cadet ForcesAuckland, NZ

#### **Freelance Software Developer**

2020 - 2021

## **Education**

#### **Bachelor of Engineering (Honours)**

2021 - 2024

The University of Auckland

- Specialising in Computer Systems Engineering
- > Cumulative GPA of 8.2/9.0 (A)

## **B** Detailed Experience

# Course Cadet StaffJul 2021New Zealand Cadet ForcesAuckland, NZ

- Selected to staff the Northern Area Junior Non-Commissioned Officer's Course 04/21
- > A mentor and role model to the course of 50+ students
- > Aided Directing Staff in **training delivery**, student assessment, and welfare management
- > Maintained **morale** and esprit de corps
- > Applied my instructional technique and leadership skills to deliver a 'very efficient Final Parade'

#### **Freelance Software Developer**

2020 - 2021

- > Back-end development with JavaScript, Node.js, and MongoDB
- > Built a custom Discord bot tailored to streamline digital order management and processing

#### **♥** Technical Skills

#### TypeScript/JavaScript

- > Front-end **browser** and back-end **Node.js** applications
- > Object-oriented and functional patterns
- > async/await, Promises, and callbacks
- > Serverless functions with Next.js and Cloudflare Workers

#### C/C++

- > Familiarity with **Arduino**-flavoured C++ and standard C
- ➤ Learnt through **projects** in high school and University Engineering courses
- > Currently using C to develop firmware drivers for an ATmega328PB
- > Used Arduino C++ for simple sensor reading and **peripheral control** functionality

#### Git/GitHub

- > Git version/source control and GitHub project management
- > Usage of **feature branches**, pull requests, issues, and GitHub Actions
- > 3000+ contributions accrued over the past 4 years

Other Languages | also have limited experience in Python, Java, and MATLAB.

#### Project Experience

#### notion-assignment-import

2022

jamesnzl.xyz/notion-assignment-import

- **Cross-browser** extension that loads Canvas assignments into a Notion database
- > 60+ users in under two months
- > Variety of tools including **Gulp**, Browserify & ESBuild, **Sass**, and PostCSS
- ➤ Learnt more about APIs, HTTP and HTTP clients, and OAuth2
- Git and GitHub

> Sass and PostCSS

> Insomnia

> TypeScript, HTML

> Gulp, Browserify, and ESBuild

# **Smart Energy Monitor** *uoa-ece209.github.io*

2022

The University of Auckland

- > Smart energy monitor I am currently designing in a group of four
- > Involves analogue circuit & PCB design, signal conditioning, using an ATmega328PB, writing firmware drivers, serial communication, and Bluetooth communication
- > Git and GitHub

> Microchip Studio

> Altium Designer

> LTspice

> Proteus VSM

**Pronto** 2020 - 2021

aucklandarmycadets.github.io/Pronto

City of Auckland Cadet Unit

- > Full-featured Discord bot to **streamline** Unit **procedures**
- > Comprehensive codebase documentation with JSDoc
- > Experimenting with Cloud Computing services including DigitalOcean, Linode, Vultr, and currently Oracle Cloud

➤ JavaScript, Node.js

> ISDoc

> SSH, Bash, Unix CLI

**➤** MongoDB

> Virtual Private Servers

**Unit Website** 2022

github.com/aucklandarmycadets/aucklandarmycadets

City of Auckland Cadet Unit

- > A modern, performant website to overhaul my Cadet Unit's online presence
- > Serverless functions with both Next.js and Cloudflare Workers
- > Created my own CDN to cache Notion's ephemeral images and optimise performance
- > Experience in managing **DNS records**, administering Google Search Console, and enhancing **SEO**
- ➤ Next.js (and React) with Vercel
- > Serverless functions
- > DNS Records, SEO

Other Projects More projects can be found on my GitHub profile.



#### 2021

> First in Course Award for ENGGEN 131: Introduction to Engineering Computation and Software Development

#### Pre-2021

- > Bayonet of Honour
- > Cadet Warrant Officer Class Two
- > Top of Course Award NZCF Senior Non-Commissioned Officer's Course
- > School Prefect and Deputy House Captain
- > First in Level 3 Calculus
- > First in Level 2 Physics
- > First in Level 2 Programming

## ! Interests

**Outdoors** I have a deep love for the outdoors, and find it an amazing outlet to recharge my batteries.

**Teaching** I find immense satisfaction in teaching and mentoring other people—crafting coherent, intuitive explanations for difficult and technical concepts and seeing the all-rewarding lightbulb moment.

Te Ao Māori I care deeply about Te Ao Māori, and enjoy engaging with the indigenous culture & language of Aotearoa New Zealand.

Youth Development I am passionate about youth development, and I am currently an Officer Cadet in the New Zealand Cadet Forces. I was previously a cadet for 5 years, including 17 months as a Cadet Warrant Officer Class Two.



#### Captain James Green, NZCF

Cadet Unit Commander

james.green@cadetforces.org.nz or +64 21 101 8020

City of Auckland Cadet Unit

James has been a **significant mentor**, and has heavily **guided** my growth as a person.

Rebecca O'Gram Associate Principal Westlake Boys' High School

Rebecca was my Year 13 Calculus **teacher**, and is one of the **most influential** teachers I have ever had.

#### Matua Johnny Waititi

rog@westlake.school.nz

Te Kaihautū o Te Puna

jwa@westlake.school.nz or +64 20 410 53400

Westlake Boys' High School

Matua Johnny was my Te Reo Māori kaiako and form teacher, and has also played a pivotal role in my life.