

Career Objective

I'm chasing opportunities 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's exactly right. I enjoy learning & seeing how technology can be applied to make effective solutions that improve human lives—whether through software, hardware, or a beautiful combination of both.

I'm a driven, reliable team player with proven leadership skills, and a knack for effective communication. I'm 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'm 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've 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'm an effective communicator with an aptitude for breaking down challenging concepts.
 - I help appreciative first-years by delivering intuitive explanations for difficult, technical concepts, and I tutored English, Maths, and Science at high school.
 - I've acquired experience in presentation skills, public speaking, and self-confidence through my New Zealand Cadet Forces development courses.
- Leadership**
- I'm 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'm often counted on for my punctuality and reliability—I don't make promises I can't 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 Staff**

New Zealand Cadet Forces
- Jul 2021

Auckland, NZ
- Freelance Software Developer**
- 2020 – 2021

Education

- Bachelor of Engineering (Honours)**

The University of Auckland
- 2021 – 2024
- Specialising in Computer Systems Engineering
 - Cumulative GPA of 8.2/9.0 (A)

Detailed Experience

- Course Cadet Staff**

New Zealand Cadet Forces
- Jul 2021

Auckland, NZ
- 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 high school Control Technology 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 I 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

2022

uoa-ece209.github.io

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
- › MongoDB
- › JSDoc
- › Virtual Private Servers
- › SSH, Bash, Unix CLI

Unit Website

github.com/aucklandarmycadets/aucklandarmycadets

2022

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.

Achievements

2021

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

Pre-2021

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

Interests

Youth Development I'm passionate about youth development, and I'm currently an Officer Cadet in the New Zealand Cadet Forces. This follows from five years as a cadet, including 17 months as a Cadet Warrant Officer Class Two.

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.

References

Captain James Green, NZCF

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

James has been a significant mentor to me, and has heavily guided my development whilst a member of the NZCF.

Cadet Unit Commander

City of Auckland Cadet Unit

Rebecca O'Gram

rog@westlake.school.nz

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

Associate Principal

Westlake Boys' High School

Matua Johnny Waititi

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

Matua Johnny was my Te Reo Māori kaiako & subsequent form teacher, and is another teacher that has played a massively pivotal role in my life.

Te Kaihautū o Te Puna

Westlake Boys' High School