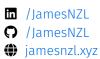
James Bao



© Career Objective

I am **chasing an internship** to grow my passion for **software** and **full-stack web development**.

I want to **improve human lives**—whether through software, hardware, or a **beautiful combination of both**.

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 apply my strong logical thinking to challenging situations, and leave things better than I found them.

Communication Skills

> I am an effective communicator with an aptitude for **breaking down challenging concepts**.

Leadership

> I am passionate about intent-based leadership and understanding each member's strengths and weaknesses.

Teamwork

> I strive to be an asset to any team. I am known for my reliability—I do not make promises I cannot keep.

Education

Bachelor of Engineering (Honours)

2021 - 2024

The University of Auckland

> Computer Systems Engineering

> Cumulative GPA of 8.3/9.0 (A-A+)

> Dean's Honours List

Experience

Windcave Ltd

Embedded Software Engineer Intern

Nov 2022 - Mar 2023

Auckland, NZ

- > Writing C/C++ firmware on a new STM32U585 ARM development board
- > Rapid prototyping of external QSPI and OSPI flash memories
- > Creating a simple Point of Sale system on CHU200TP payment terminal

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++

- > Experience with C and Arduino-flavoured C++
- > Learnt through **projects**, University Engineering courses, and **industry**
- Used C to develop OSPI memory drivers for an STM32U585
- > Used Arduino C++ for simple sensor reading and **actuator control** functionality

Git/GitHub

- > Fluency with **feature branches**, pull requests, issues, and GitHub Actions
- **> 5300+ contributions** accrued over the past **5 years**

Other Languages I also have familiarity with C#, Python, Java, and MATLAB.

notion-assignment-import

jamesnzl.xyz/notion-assignment-import

- > Cross-browser extension that loads Canvas assignments into a Notion database
- > 3800+ unique users in twelve months
- > Variety of tools including **Gulp**, Browserify & ESBuild, **Sass**, and PostCSS
- > Learnt more about **REST APIs**, HTTP and HTTP clients, and **OAuth2**
- ▶ Git and GitHub

▶ Sass and PostCSS

Insomnia

► TypeScript, HTML

▶ Gulp, Browserify, and ESBuild

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
- **▶** JSDoc

▶ 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.

Y Achievements

- > First in Course Award for ELECTENG/COMPSYS 209: Analogue and Embedded Firmware Design
- > First in Course Award for ENGGEN 131: Introduction to Engineering Computation and Software Development
- > Dean's Honours List 2022

School Prefect and Deputy House Captain

> Bayonet of Honour

> First in Level 3 Calculus

> Top of Course Award

- > First in Level 2 Physics
- NZCF Senior Non-Commissioned Officer's Course
- > First in Level 2 Programming

9 Passions

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

Teaching I love crafting intuitive explanations for difficult, technical concepts—and seeing the lightbulb moment.

Te Ao Māori I care deeply about embracing the indigenous culture & language of Aotearoa New Zealand.

Youth Development 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.



Weili Liu Embedded Development Manager
weili.liu@windcave.com Windcave Ltd

Weili has been a **significant mentor** and **guided** me closely during my internship.

Rebecca O'Gram Associate Principal

rog@westlake.school.nz

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 jwa@westlake.school.nz

Te Kaihautū o Te Puna 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.

2022