Adam Bodicoat

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SUMMARY

I am a graduate software engineer from the University of Auckland with a passion for learning and applying my knowledge to solve complex problems. I have pursued diverse and challenging experiences, from working at Jane Street Capital to publishing my own research in AI. These reflect my aptitude for problem-solving and ability to quickly adapt to new technical areas. In my spare time, I enjoy music and playing sports such as piano, basketball, and volleyball.

EDUCATION

The University of Auckland **Completed: Dec 2025**

- Bachelor of Engineering (Honours) – Software Engineering, First class honours, GPA: 8.5/9 (A+)

High School **Jan 2016 – Nov 2021**

- Westlake Boys' High School – NCEA Level 3 Excellence endorsed, 7 NZQA scholarships
- 1500 SAT, 99th percentile with 800/800 in maths and 700/800 in reading and writing, 5/5 AP Calculus AB exam

PROFESSIONAL EXPERIENCE

Jane Street Capital ▪ TDOE Intern **Dec 2025 – Feb 2026**

- Trading desk operations engineering intern, using functional programming to develop tools to improve trading operations
- Ensuring efficient workflow within trading desks by managing day-to-day trading operations, software, and processes

Skills Obtained: Quantitative Trading, Functional Programming, Context Switching

The University of Auckland ▪ Summer Research Scholar **Nov 2024 – Feb 2025**

- Publication *Understanding LLM-Driven Test Oracle Generation* in AIware conference November 2025
- Researching Large Language Models' (LLMs) capabilities for test oracle generation with real-world bugs and various prompting strategies. Developed Python tool to automatically evaluate OpenAI and StarCoder LLMs against 36 bugs and 4 strategies

Skills Obtained: Literature Review, Large Language Models, Academic Report *DOI: 10.1109/AIware69974.2025.00011*

The University of Auckland ▪ Teaching Assistant **Jul 2024 – Oct 2024**

- Managing 1-2 weekly tutorial streams of 30 students for ENGGEN 131: Introduction to Software Development
- Teaching core programming concepts with MATLAB and C, teaching how code is applied in students' prospective specialisations

Skills Obtained: Teaching, Educational Communication

Cloudstore Ltd ▪ Production Assistant **Nov 2023 – Feb 2026**

- Created software to control standing desks by reverse engineering controllers and analysing signals between their desk motors
- Flashing, testing, and debugging productivity devices, including smart pucks, handsets, and airconsoles, using Perl and C

Skills Obtained: Embedded Systems, Hardware, Product Testing

SMINKS Labs ▪ Robotics Tutor **Apr 2019 – Oct 2019**

- Teaching fundamental robotics and coding concepts to groups of 15 to 20 primary and intermediate school students weekly
- Fostering an interest in using programming to solve problems through gamified challenges

Skills Obtained: Creative Teaching

PERSONAL PROJECTS

Neural Network Implementation https://github.com/adxmb/neural-network

- Implementing a custom neural network in Python to identify different accents, learning the impact of various training strategies
- Using a Flask server to handle HTTP requests, model trained on a custom dataset of five predominant English-speaking accents

AI-Powered Plant Matcher https://github.com/LocalhostLtd/DEV-Hackathon-2024

- **1st place** in DEVS Hackathon 2024 *Hack for Humanity*, working in team of 6 developers building full stack application over 48hrs
- Leveraging OpenAI API for AI-driven preference matching to plants and Pixabay API for image generation
- Followed agile development approach using React, TypeScript, and Next.js with Firebase and TailwindCSS

EscAIpe Room Game https://github.com/adxmb/Softeng206-EscapeRoom-project

- Team of 3 developers creating an escape room GUI application for 'client' *Brain-e-Riddlers* using OpenAI API integration to generate unique context-dependent riddles and a game master using prompt engineering techniques
- Incorporated multithreading to significantly reduce response time and saving 3 seconds per OpenAI request

ADDITIONAL EXPERIENCE

ThinkPod Consulting ▪ HR-Lead **Jan 2024 – Dec 2024**

- Managing applications, recruitment, interviewing, and selection of 20 new consultants from over 50 applications each semester to create perfect groups for each client for the semester and calmly resolving potential interpersonal conflicts
- Investigating areas for improvement in ThinkPod via individual buddy meetings with consultants and group feedback sessions
- Ensuring consultant teams can provide the best results for real-world clients with appropriate mentoring from executive committee members

Skills Obtained: Communication, Leadership, Organisation

ThinkPod Consulting ▪ Consultant **Mar 2023 – Jun 2023**

- Implementing a new supporter management system in team of 6 for Fertility NZ charity to resolve issues with previous system
- Shortlisting 3 solutions that best addressed the previous issues and further user requirements from client meetings

Skills Obtained: Time Management, Research

NZPMC ▪ NZPhO Team **Sep 2022 – Jul 2023**

- Created and organised the NZPhO and NZPMC physics competitions for top-level New Zealand high school physics students
- Increased participation in NZPMC competition by more than 41% and over 150 participants in the first NZPhO competition

Skills Obtained: Scenario Planning, Management, Logistics

Interact ▪ President **Jan 2020 – Nov 2021**

- Working with the local Milford Rotary Club on community initiatives, including the Seabin project
- Hosting 6 events during the year for high school students, improving club participation by more than 90%

Skills Obtained: Leadership, Delegation, Networking

AWARDS

Engineering Deans' Honours List **2025, 2023, 2022**

- Awarded to the top 5% of the University of Auckland engineering cohort each year

UoA DEVS Hackathon **2024**

- 1st place for *Hack for Humanity* hackathon with AI-Powered Plant Matcher project

UoA Economics Society and Deloitte Economics Competition **2023**

- 3rd place report and presentation in team of 4, preparing solutions for New Zealand's housing crisis for Deloitte judges

Pullan Prize for First Place in the New Zealand Engineering and Science Competition **2021**

- 1st place out of 202 teams of 4 answering *How many 1 in 100-year extreme weather events can NZ expect to experience over the next decade?* Final reports judged by University of Auckland academics
- Used MATLAB and statistical forecasting to find expected value and margin of error for different atmospheric phenomena

TECHNICAL SKILLS

Languages

- Java, C++, Python, C, OCaml, JavaScript, TypeScript, Perl, CSS, HTML, SQL, MATLAB, R, LaTeX

Tools and Technologies

- Git, GitHub, JUnit, React, Maven, Docker, Node.js, OpenAI, Wireshark, MySQL, PostgreSQL