Carson Mills

027 800 8883 | carsonkmills5@gmail.com | github.com/cmil394 | www.carsonmills.org

EDUCATION

University of Auckland   Auckland, NZ
Bachelor of Science, majoring in Computer Science   *Jul 2023 – Nov 2025*

Auckland University of Technology   Auckland, NZ
Certificate in Science and Technology   *Jul 2022 – Jun 2023*

EXPERIENCE

Contract Software Developer   December 2025 – Present
Fulfillment Plus   *Auckland, NZ*
- Developing a full-stack SaaS time-tracking platform using React, Node.js, PostgreSQL and TypeScript
- Designed a multi-tenant data model with customer-scoped task tracking, live employee timers and a real-time admin dashboard with broadcast logout
- Implemented JWT-based authentication with RBAC and an admin approval workflow for account management
- Built automated hour and cost reporting across customers and tasks supporting performance analysis and business decision-making

Software Developer (Capstone Project)   July 2025 – November 2025
University of Auckland   *Auckland, NZ*
- Collaborated in a team of 6 to design and develop a game for a client
- Developed core gameplay mechanics using Python, TypeScript, and Socket.io, enabling real-time multiplayer interactions
- Designed and implemented backend APIs using Python, following MVC architecture and service-based design
- Delivered a client-facing product on schedule, gathering requirements and iterating features based on feedback

PROJECTS

Guess Which? | *Python, React, Typescript, Socket.io, Firebase, AWS EC2*
- Built *Guess Which?*, a real-time educational game for lectures inspired by the traditional board game "Guess Who?", enabling players to identify academic concepts through strategic questioning
- Developed the frontend game interface and mechanics using TypeScript and Socket.io
- Implemented backend APIs and WebSocket channels using Python, Flask, Flask-SocketIO, and Redis to manage live games, classrooms, and deck data
- AI-based moderation system to detect and penalize cheaters
- Integrated Firebase Authentication and Firestore for secure user management, game session persistence, and scalable real-time data storage

Muscle Mate | *Python, FastAPI, TypeScript, React, JWT*
- A fitness/gym tracking app that allows users to log their workouts, track body weight and PBs with custom and recommended personalized workouts
- Built backend APIs using Python and FastAPI with type-safe endpoints and automatic docs
- Implemented authentication, relational database models, and modular routers for a scalable, maintainable backend
- Built filtering and navigation for months and years, providing users a clear overview of their workout sessions
- Dynamic workout dashboard in React and TypeScript with creation, editing, and history tracking

League of Legends Connections | *JavaScript, TypeScript, React, Node.js*
- A League of Legends-themed version of the NYT game "Connections" with active users
- Responsive frontend ensuring accessibility across various screen sizes
- Built user submission system where community can create daily puzzles, reducing content creation workload
- Implemented local storage persistence to save player progress and puzzle completion status

TECHNICAL SKILLS

Languages: Python, Java, C#, SQL (Postgres), Typescript, JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, Django, JUnit, FastAPI, ASP.NET
Developer Tools: Git, Postman, Chrome DevTools, VS Code, Visual Studio, PyCharm, IntelliJ, AWS
Libraries: Axios, pandas, NumPy, PyTorch