

# Zac Cleveland

Software Development and Mathematics

+64204922420  
mail@ohaizac.dev

## CAREER OBJECTIVE

My objective is to gain experience in software development in a professional environment. This includes working in a team of developers using version control, project management software, and collaboration tools. I would also like to apply my skills in programming and problem solving to build large scale software, and learn how such software is organized.

## EDUCATION

### University of Auckland — Bachelor of Science

MARCH 2020 - NOVEMBER 2022

Double Major in Computer Science and Mathematics.

8.231 GPA

### Howick College — NCEA Level 3

JANUARY 2015 - DECEMBER 2019

Achieved NCEA Excellence in Level 1, 2 and 3.

## PROJECTS (Available on GitHub)

### mediasync — watch videos together, online (Rust, Typescript)

Mediasync is an extension built for Chrome, Firefox and Edge that allows people to watch online video content together. Playback can be synchronized between any number of devices, anywhere in the world. I have developed mediasync with Gabriel Belcher, a friend of mine. It is still in development, and the source code is currently private.

A video demo is available on my website.

### shaderbg — animated desktop backgrounds (Rust)

Shaderbg provides animated desktop backgrounds. It is written in Rust with a focus on being cross platform (Windows, macOS, and Linux) and lightweight. The program loads scenes from TOML files and renders them using WGSL compute, vertex, and fragment shaders. I am still developing shaderbg.

## SKILLS

### Programming Languages

- C, C# and C++
- TypeScript
- Rust
- Java
- Python

### Programming Technologies

- Git
- CMake
- AWS
- Chrome Extensions
- Node and NPM
- React

Algorithms

Debugging

Pure Mathematics

Teamwork

Problem Solving

## CONTACT

LinkedIn

<https://linkedin.com/in/zaccleveland>

GitHub

<https://github.com/zaccnz>

Website

<https://ohaizac.dev>

Email

mail@ohaizac.dev

## AWARDS

Dux Award

Beachlands School 2014

Rotary Scholarship (\$1000)

Howick College 2014

NCEA Excellence Endorsement

Howick College 2017, 2018, and 2019

## sudoku — game and solver (React, Typescript)

An online sudoku game and solver created with React, Typescript, and Vite. The solver uses the Wave Function Collapse algorithm, which is slowed down to allow the user to watch how it solves the problem.

## solitaire — game (C, Raylib, Emscripten)

A cross platform (Windows, macOS, Linux, Web) version of the classic solitaire game. It supports animations, a game timer, a leaderboard, and a card texture pack system. Users can choose to drag and drop the cards or click to move them automatically.

More projects are provided on my website and GitHub

## WORK EXPERIENCE

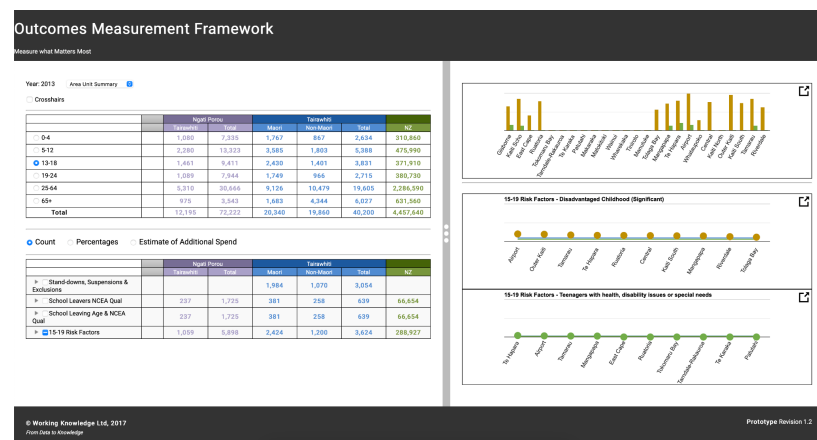
### ADHB, Auckland — Temporary Assistant

APRIL 2020

Helped with assembling conference systems for remote doctors appointments and meetings at multiple hospitals in Auckland. This was during the Covid-19 Pandemic.

### Working Knowledge, Remote — Software Development

MAY 2017 - JULY 2017



Worked on developing a prototype dashboard for visualizing statistics.

Reference - Nadine Wooller (021687767 - unavailable until 05/07)

### NCEA Scholarship Chemistry

Howick College 2019

### Certificate of Distinction

6 Courses

University of Auckland 2020

### First in Course Award

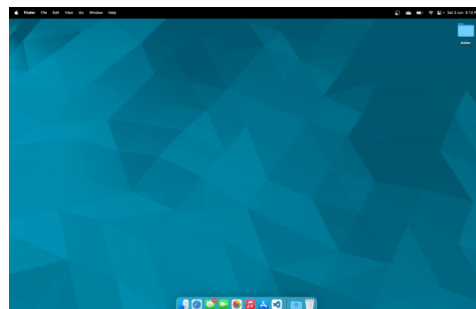
3 Courses

University of Auckland 2021

### Certificate of Outstanding Achievement

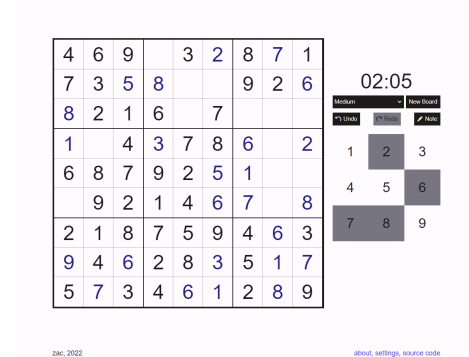
3 Courses (2021) 1 Course (2022)

University of Auckland

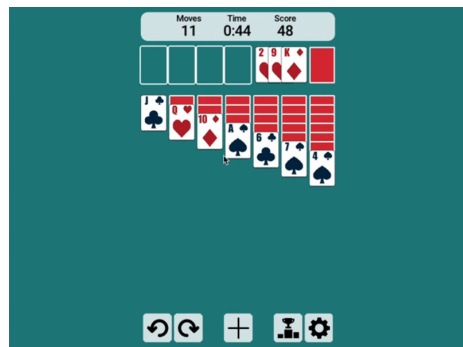


shaderbg

### sudoku solver



Sudoku



Solitaire