

Contact:

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Education:

University of Auckland (July 2021 – Nov 2024 (estimated))
Bachelor of Computer Science with a focus on Math and Statistics.
GPA: 7.7/9

Programming Languages:

- Java
- Python
- HTML/CSS/Javascript
- R
- C#
- Rust

Skills:

- Team Work
- Communication
- Leadership
- Problem Solving
- Teaching Concepts and Scenarios
- Front End Web Element Design
- Linux and Windows Operating Systems
- Math and Statistics

Volunteering:

- Class Rep for:
 - Physics 140
 - Computer Science 220
 - Computer Science 320
- Teacher at Code Club 2021.

Achievements:

- High Distinction (A+) for:
 - CS235: Software Development Fundamentals
 - CS230: Object-Oriented Software with Java
 - CS220: Algorithms and Data Structures
 - CS130: Software Fundamentals (DS&A)
 - CS101: Programming Principles
 - STATS220: Technology in Statistics
 - STATS101: Intro to Statistics
 - Math120: Algebra
 - EDUC121G: How people learn
- Distinction (A/A-) for:
 - CS225: Discrete Mathematics
 - CS210: Low-Level Programming and Systems
 - CS120: Math for Computer Science
 - CS110: Computer Systems Introduction
 - Stats201: Data Analysis
 - Stats125: Probability and Applications
 - Math208: General Mathematics 2
 - Math108: General Mathematics
 - Physics140: Logic Gates and Circuit Design
 - Physics120: Physics Concepts

Aspirations / Interests:

- Software Development
- Simulation Programs
- Math Programs
- Web Development
- Teaching

Personal Statement:

I am very interested in working on a project with WDCC to develop my understanding of Web Development. I believe WDCC is a really great club that helps push many students to better succeed in Web Development, with real world examples of websites to build. Because of this I would be greatly interested in joining in one of the projects. I believe I will be a great fit for this because I have experience from CS235 working on a games web app in a group, where I had to learn HTML / CSS to build a webpage and I deployed it with a free subdomain and docker (deployed over a friends raspberry pi).

Work Experience:

- Cluey, Sydney, AU (Online)
 - Math And Physics Tutor (July 2023 – Current)
 - Communication Skills: Developed ability to explain algorithms and reasoning.
 - Understanding Skills: Developed ability to understand how other people understand a scenario and work with their understanding as opposed to mine.
- KFC, Auckland CBD, NZ
 - Team Member (January 2023- July 2023)
 - Teamwork Skills: Collaborated with other team members to manage orders that leave at the same time
 - Communication Skills: Interacted with customers to understand their preferences and needs.
- Canvas Plus, Wellsford, NZ,
 - Data Entry (July 2020 – November 2020)
 - Data management and collaboration: Designed tables to display relevant information on old paper forms – still in use today.
 - Teamwork: Collaborate with accountants to decide what information is important and what is not when designing the table.
- Kaipara Kids, Maungaturoto, NZ,
 - After School Caretaker (July 2020 – November 2020)
 - Patience and empathy: Ensured student's safety and well-being, and understood their needs and feelings.
 - Leadership: Actively engaging with students in activities and constructing a positive environment with them.

Projects:

- Flow Field Simulator
 - P5.js library for visualisations and how to optimize a large program to use the CPU. Including intentional spawn sites, and despawn conditions.
 - I learnt how to implement factory patterns to generate flow lines.
 - I learnt how to display a p5 sketch on Github Pages:
<https://jeffcct.github.io/ProjectShowcase/>
- Maze project
 - I learnt how to construct a grid datatype and construct a visualiser for displaying this in the terminal
 - I learnt how to use search algorithms like DFS, Iterative deepening and A* to generate a maze.
 - I learnt how to use Question Driven Development to not require a tutorial to solve problems myself and construct a program.
 - Saving to a file and OO design to use extension over modification.
- Game Web App
 - I learnt how to work in a team and manage members to ensure we are working efficiently by delegating tasks and recording results to ensure success.
 - Built a data pipeline to convert data from a CSV file to our database, including collated data from description strings and building a database which follows the 3rd normalized form.
 - Use CSS / HTML to design a complex webpage, and use Jinja to create reusable elements and design templates for different web pages including interactive cards to display game information.
 - Use the Flask framework in Python to construct an interactive webpage with rich features like wishlists, reviews and ratings.
 - Learnt how to build a web app to production-ready with a WSGL server and how to use docker to dockerize my web app: <http://fred.firepig.net/>
 - Learnt the strategy pattern to build a repository that allows transactions between the front-end and the back-end of the webpage.

Github link: <https://github.com/jeffcct>