

# Uday Daroch

## Curriculum Vitae



022 651 5800



UdayDaroch@gmail.com



New Zealand Permanent Resident visa



St Albans, Christchurch

### Career Objective:

As a second-year software engineering student, I am deeply passionate about software development. My focus lies in full stack development, where I enjoy crafting both user-interfaces and robust back-end systems. Exploring system architecture intrigues me, while my dedication to quality is reflected in my keen interest in software testing.

### Qualifications and Current Studies:

**University of Canterbury**, Christchurch, NZ

**Bachelor of Software Engineering with Honors**, Expected Graduation date: 12/2025

**Current GPA:** 6.00

**Christchurch Boys' High School**, Christchurch, NZ

**NCEA Level 3 with Excellence**, 11/2021

### Exposure to Coding:

I am proficient in java and python, and I have had a decent exposure in a couple of other programming languages, including C, and C#. These have given me a solid foundation in programming concepts and problem-solving. Specifically courses such as COSC122, COSC262, and SENG201 have provided me with insights into coding structures and design patterns which I enjoyed learning. I learned a lot about various algorithms, such as sorting and searching algorithms, and data structures, such as arrays, linked list, hash tables, heaps, binary trees, and many others, which really helped me develop a deeper understanding of how data can be organized, manipulated, and used within programs.

### Projects:

#### JAVA GAME (PAIR PROJECT)

Recently, I completed a Java-based university project where I developed a game using ECLIPSE and Java Swing GUI system. This project allowed me to apply my programming skills in a practical setting, enhancing my understanding of software development and Java frameworks. This project also helped me understand the importance of evaluating my own code as we were asked to write our own Junit testing cases for all the different scenarios that could take place in the game. In addition to academic projects, I am currently working on a personal endeavour.

#### CYCLEWAYS (GROUP PROJECT)

In my current semester, I'm collaborating with a group of six individuals, assigned randomly, in the SENG202 course. Our project involves utilizing raw data from Waka Kotahi to create an application tailored for cyclists, our target users. The application aims to assist cyclists in planning their journeys effectively by incorporating a map viewing feature powered by a MAP API. Moreover, we're enhancing the user experience by presenting data in a more comprehensible manner and facilitating its interpretation through graphical representations. Our development approach adheres to the MVC (Model-View-Controller) model, and we're adopting the spiral model for prototyping. To bring our vision to life, we're employing JavaFX, and optionally SQLite, along with the Java programming language.

## **PYTHON COMPILER**

I have also developed a Python Recursive descent compiler in one of my courses. I developed it in chunks, first focusing on the scanner that reads the source code character by character producing a sequence of tokens. In the second step I used these tokens to the parser which processed the tokens and checked for the syntax and omitted irrelevant details.

## **BASIC CLIENT SERVER APPLICATION(SOCKET PROGRAMMING)**

In this assignment project, I developed two programs in python. The first one, called the server, allowed the other programs, called clients, to send and read messages to/from other clients. This enabled client and the server to communicate through TCP sockets, exchanging both control and actual message data via packets. My program involved sending Packets of data as byte arrays, from to/from other clients, using server IP address and an available port number.

## **YEAR 13 PROJECT**

In my first year of programming during the 13th grade, I created a game using Unity and C#. The primary objective of the game was to educate students in rapid mathematics. However, instead of just entering answers, my game adopted a layout reminiscent of a subway surface game. In the lower middle section of the screen, players were presented with math problems that they had to solve before reaching the three entrance gates down the road. The road consisted of obstacles which they had to avoid whilst doing maths in their head. Each gate displayed a potential answer above it. To progress and succeed, players had to select the correct entrance gates to avoid losing lives and accomplish various tasks within the game.

## **PERSONAL PROJECT**

I am currently planning to develop a note-taking website designed specifically for students. This platform will enable students to create accounts, specify their courses and university information, and share notes with others. By implementing a search feature based on course codes and dates, students can easily access notes from fellow classmates anonymously. Moreover, I plan on incorporating a rating system, based on the quality of notes of those anonymous students, which will be visible to all users when they have searched for their desired notes. This will enable them to make informed decisions when seeking assistance from other students.

## **About me:**

---

As a student, I consider myself to be hardworking, always striving to learn new things and improve. I embrace failure as an opportunity for growth and continuously work towards bettering myself. I am known for being friendly and approachable, making it easy for others to engage in conversation with me. When faced with challenges or uncertainties, I actively seek for clarification by asking questions and seeking guidance, and just try my best to break down bigger problems into sub problems to make it easier to complete tasks. Furthermore, my experience of playing cricket for seven years has given me a deeper understanding of teamwork and the importance of clear communication within a group dynamic.

## **SKILLS:**

---

### **Communication and Relationship Building Skills:**

- Good Communication skills including good verbal, written and group presenting capabilities delivering clear and concise information.
- Able to engage with people at all levels and from various backgrounds, developing and maintaining excellent relationships with customers and colleagues.

### Organisational and Administrative Skills:

- Good organisational, time management and multitasking abilities, productive and efficient
- Good attention to detail, producing quality work within the required timeframes and deadlines.

### Technology and Computer Skills:

- Competent with modern technology, information systems and mobile devices.
- Good computer operating skills across a range of programmes, including the Microsoft Office suite.
- Comfortable with many IDE's (integrated development environment), including VSCode, ECIPILISE, wing, PyCharm, IntelliJ.
- Basic Blender modelling knowledge.
- Basic knowledge of HTML, CSS, and JavaScript(git hub project).
- Basic knowledge of C, C#, and embedded system programming.
- Basic Knowledge of SQL and SQLite.
- Experience in sprint based(Agile) Software develop method and the spiral development method.
- Experience with Git during the pair project as well as the current group project.

### Operational Competencies:

- Excellent work ethic, always displaying resilience, loyalty, integrity, and confidentiality.
- Flexible and accommodating, adapting to changing demands and workplace needs.
- An appreciation and respect towards individuals of differing abilities, cultures, and beliefs
- Good knowledge and compliance regarding occupational health and safety requirements

## Employment History:

**Part time - Waiter staff, Saket  
Indian Restaurant**

**Duration: Dec 2018 – Oct 2021**

**Part time - grocery assistant,  
Pak'n Save.**

**Duration: Dec 2021 – July 2022**

I have been able to gain a range of professional skills through my experience as a waiter and a supermarket worker. These roles have really helped me over come my shyness, allowing me to effectively interact with customers. Additionally, these roles have also enhanced my ability to handle tasks efficiently, which allows me to manage multiple responsibilities and prioritize tasks effectively.

## Out of Work Interests:

---

- Running
- Playing and following cricket
- Touch typing
- Badminton
- Listening to music and watching movies
- Spending time with family and friends
- Started learning piano

## Referees:

---

- Referees are available on request