

Alyssa Kou

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Surrey, BC

Technical Skills

- Languages: C++, C, CSS, C#, Python, HTML, Javascript, Java
- Software/Frameworks: IDLE, Visual Studio Code, Unity, Canva, Microsoft, MatLab
- Operating Systems: IOS, macOS, Windows, Linux

Technical Project Experience

Turning Over a New Leaf

Oct 2023

Fall Hacks, Simon Fraser University

- Worked with a team of 4 to create a user-interactable educational game within the limit of 12 hours
- Interactive game where users turn a leaf in order to unlock mini-games
- Used Unity with C# scripts to create a user-friendly and responsive GUI to allow user interaction with mini-games and the main menu
- Game objects were made using Unity UI to maximize user experience and visual consistency

Chess game

Oct 2023

VS Code, Languages: HTML, Javascript, CSS

- Used HTML to define the structure of the web page by incorporating elements for displaying the game board, player information, and game-related content
- Enhanced UX and UI of the application by styling the chessboard and pieces using CSS, specifying dimensions, colours, and layering to create a visually appealing and functional game interface
- Implemented rules and restrictions using Javascript that determine how the game pieces can be played

Birthday Lookup System

Jan 2023 - April 2023

CMPT 125, Simon Fraser University

- Used C/C++ to apply object-oriented programming principles along with ADTs and created binary search trees to sort a list of birthdays
- Implemented a program that loaded a file of unordered birthdays and sorted them by either name, date, or profession, depending on user input
- Performed quick sort to compare birthdays by using conditional statements, which allowed for easier sorting
- Checked for heap memory leaks using Valgrind, ensuring that dynamically allocated variables were deallocated correctly

Blackfoot Language App

Sept 2022 - Dec 2022

CMPT 120, Simon Fraser University

- Collaborated with a partner and coded a program in Python using IDLE that can teach the user the indigenous language, Blackfoot
- Tested and debugged the code using print statements to diagnose and address issues
- User-friendly UX and UI design incorporated visual and audio elements, making the language learning process an engaging experience through interactive games

Work Experience

Japanese Teacher Assistant

Aug 2022

Canada Stay Holding Inc, White Rock

- Taught Japanese students the fundamentals of English, which reduced their grammatical and pronunciation errors
- Worked with teachers in aiding the students to learn about Canadian culture
- Managed the students in groups as we went out on trips for the students to explore and learn more about Vancouver and Canada.

Piano Tutor

Dec 2019 - Oct 2022

South Surrey

- Tutored student to improve their technical abilities and broaden their range of piano knowledge
- Taught piano theory and improved the student's pitch, rhythm, and harmony
- Helped the student gain more confidence in their playing through encouragement and demonstration

Volunteer Experience

Simon Fraser Student Society Community Free Fridge Stocking

Oct 2023 - Nov 2023

Simon Fraser University, Burnaby

- Supported the local SFU community by stocking the community free-fridge with donated goods from the nearby market
- Collaborated with a team to ensure the availability of essential items in the community free fridge, contributing to a positive impact on the local SFU students' well-being

Computer Science Student Society Frosh Leader

Sept 2023

Simon Fraser University, Burnaby

- Welcomed new computer science students to SFU and helped build a sense of belonging through a series of activities and discussions about their new academic journey
- Provided valuable advice and insights about their upcoming classes, which helped in their course planning

Education

**Bachelor of Applied Science, Major in Computing Science,
Minor in Criminology**

Sep 2022 - In progress

Simon Fraser University, Burnaby