

# Alyssa Kou

778-957-9566

alyssahkou04@gmail.com

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

### Personal Website

Dec 2023 - Jan 2024

VS Code, Languages: HTML, Javascript, CSS

[alyssa-k528.github.io](https://alyssa-k528.github.io)

- Developed a responsive personal website using HTML, CSS, and Javascript
- Enhancing user experience and user interface design by implementing buttons that lead users to different webpages for self-exploration
- Responsive website that adapts to various screen sizes

### 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

## **Education**

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

Sep 2022 - In progress

Simon Fraser University, Burnaby