# **SAKURA SEKIGUCHI**

A Computer Science student seeking a Co-op position to apply software development skills and grow as a developer.

sakuras4649@gmail.com | 778-231-9824 | GitHub | LinkedIn

### **EDUCATION**

#### UNIVERSITY OF BRITISH COLUMBIA

Vancouver, BC

**Bachelor of Science, Major in Computer Science** | GPA: 86.4% (CS: 87.4%)

**Graduating May 2028** 

Relevant Courses: Software Construction, Algorithms and Data Structures, Computer Systems, Relational Databases, etc.

Extracurriculars: Computer Science Student Society (Graphic Designer), Japan Association (Promotion Executive)

## **PROJECTS**

# **Game Data Management System** – Web Application

July - August 2025

To support one-to-one turn-based games by managing skills, player profiles, game rounds, and performance tracking.

- **Development:** Designed relational tables from an ER diagram and stored persistent gameplay data using Oracle SQL.
- Frontend: Built a web interface that allows users to perform queries such as dynamic insertion, deletion, and selection.
- Backend: Implemented backend functionality including route handling and supporting real-time data retrieval.
- Tools & Technologies: Oracle, SQL, JavaScript, HTML, Node.js, Express.js, Git, GitHub, VS Code

**Food Radar** (BCS HACKS Hackathon) – Full-Stack Web Application

March 2025

To reduce household food waste and improve user convenience in managing food inventory, addressing sustainability concerns.

- **Development:** Built a full-stack web application using the MERN Stack and Google Cloud Vision API for users to easily track fridge inventory via image recognition, with optional manual entry for pantry items.
- Teamwork: Collaborated in an effective workflow using version control, code reviews, and rapid feature prototyping.
- Frontend: Contributed to integrating APIs and refining UI components using React for a responsive user experience.
- Backend: Led backend development with JavaScript, building a RESTful API server and integrating MongoDB.
- **Testing:** Verified API functionality using Postman to ensure reliable backend responses.
- Tools & Technologies: JavaScript, React, MongoDB, Express.js, Node.js, Postman, Git, GitHub, VS Code

#### **Shift Scheduler**

To automate employee shift assignments to minimize manual tasks for managers and reduce staffing errors.

Java Desktop Application

September – December 2024

- **Development:** Built a Java-based desktop application to improve shift scheduling efficiency by managing worker assignments, enforcing shift capacities, and distinguishing between trainees and regular staff.
- **Documentation:** Used *Modifies/Requires/Effects* clauses for each method to enhance maintainability of the code.
- Data Management: Implemented JSON-based persistence and an event logging system for load/save functionality.
- Testing: Increased code quality by writing unit tests before implementation to facilitate efficient debugging.
- Tools & Technologies: Java, Java Swing, Git, GitHub, VS Code

Full-Stack Web Application

July 2025 – Present

- **Development:** Built a web application using the MERN Stack to provide a more scalable and user-friendly experience.
- Tools & Technologies: JavaScript, React, MongoDB, Express.js, Node.js, Postman, Git, GitHub, VS Code

## **TECHNICAL SKILLS**

Languages: Java, JavaScript, C/C++, SQL, HTML, R

Frameworks: React, Node.js, Express.js, Mongoose

Tools & Databases: Oracle, MongoDB, Git, GitHub, Postman, VS Code, Windows, Linux

