

SAMANTHA (SAM) LUI

(604)-729-8023 | sam_lui@hotmail.ca | <https://www.linkedin.com/in/sam-lui-6250a787/> | <https://github.com/samlui1009>

EDUCATION

Bachelor of Computer Science (Third Year) University of British Columbia	Vancouver, B.C. Sept. 2024 - Present
Advanced Diploma – Clinical Genetics Technology (Graduated with Distinction – 88%) British Columbia Institute of Technology	Burnaby, B.C. Aug. 2020 – Oct. 2021
Bachelor of Health Sciences (Life Sciences, Fall 2015 – Dean’s Honour Roll) Simon Fraser University	Burnaby, B.C. Sept. 2011 – Dec. 2017

TECHNICAL PROJECTS

DailySips Academic <i>Java, JUnit, JSwing</i>	Jan. 2025 – Apr. 2025
<ul style="list-style-type: none">Applied OOP principles to design a Java-based beverage tracker (CLI and graphical user interface through Java Swing) to help users monitor daily caloric, sugar and caffeine intakeImplemented JSON-based data persistence, ensuring proper data management (saving/loading) across multiple sessionsWrote comprehensive JUnit tests with JUnit Jupiter, validating code functionality while improving robustness	
Pantry Pal BCS Hacks 2025 <i>React + Vite, HTML, CSS, JavaScript, MongoDB, Groq</i>	Mar. 2025 – Mar. 2025
<ul style="list-style-type: none">Built a full-stack app via React, Vite and CSS3 to generate AI-powered recipes from user-selected ingredients, cuisine preference and cooking timeEngineered backend logic and built API routes to store and manage the user’s virtual pantry via MongoDBIntegrated Groq API for dynamic recipe generation, ensuring seamless data handling between frontend and backend	
Enduro cmd-f 2025 Hackathon <i>React + Vite, HTML, CSS, JavaScript, Groq</i>	Mar. 2025 – Mar. 2025
<ul style="list-style-type: none">Leveraged React, Vite and CSS3 to build a frontend application, aiming to increase user engagement in physical activityIntegrated the Groq API to implement an interactive AI chatbot, effectively handling API calls and response renderingUtilized version control software via Git and GitHub for delivery of a frontend MVP	
Predicting Player Recruitment with PLAI Academic <i>R, Jupyter, Git/GitHub</i>	Sept. 2024 – Dec. 2024
<ul style="list-style-type: none">Cleaned, transformed and visualized 1,500 + records of data using R and Jupyter for the Pacific Laboratory for Artificial Intelligence; developed a KNN-regression algorithm to identify attributes correlated with high-quality play timeEffectively collaborated in a team, using Git and GitHub to ensure smooth workflows and project management	

PROFESSIONAL EXPERIENCE

<i>Provincial Health Services Authority Vancouver, B.C.</i>	Jul. 2021 – Aug. 2024
Clinical Genetics Technologist	
<ul style="list-style-type: none">Performed high-volume culturing and analysis of biohazardous patient specimens using advanced cytogenetics and molecular techniquesOperated, maintained and troubleshooted diagnostic laboratory equipment by following standardized operating procedures; liaised with vendors and IT teams to minimize downtime in a fast-paced, time-sensitive environmentActively mentored incoming practicum students and junior technologists on various assays, ensuring full mastery of skills in a supportive learning environment	

EXTRACURRICULARS & LEADERSHIP EXPERIENCE

<i>The C.O.D.E. Initiative Vancouver, B.C.</i>	Sept. 2024 – Apr. 2024
Remote Volunteer Tutor	
<ul style="list-style-type: none">Held one-on-one tutoring sessions for neurodivergent youth in web development and Python fundamentals, promoting the development of critical thinking & problem-solving skills	

TECHNICAL SKILLS

Languages HTML, CSS, Python, Java, SQL (PostgreSQL), R
Frameworks/Libraries React, JUnit, JSwing, Tidyverse (R programming)
Developer Tools Git, GitHub, Vite, MongoDB, JSON, Node.js (build environment), Visual Studio Code, Jupyter, Filmora