SAMANTHA (SAM) LUI

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EDUCATION

Bachelor of Computer Science (Third Year) | University of British Columbia *September 2024 – May 2027*

Advanced Diploma – Clinical Genetics (88%) | British Columbia Institute of Technology *August 2020 – October 2021*

Bachelor of Health Sciences (Dean's Honour Roll) | Simon Fraser University *September 2011 – December 2017*

PROFESSIONAL EXPERIENCE

CIHI – Incoming Applied Cloud Architecture Developer Intern | North York, O.N. *January 2026 – April 2026*

- Will assist application architects in the design and development of cloud migration proof-of-concepts for the Cloud Maturity Project, with focuses on **AWS**, **CI/CD** pipelines with **GitLab**, and containerization technologies

Shared Services Canada – I.T. Analyst Co-op Student | Vancouver, B.C. *August 2025 – Present*

- Delivering **Windows 11 imaging**, **BIOS configuration** and QA testing for hardware deployments via **Service Manager 9**, ensuring reliable end-user system performance
- Managing **Microsoft Azure** user states via **MDM** and **SCCM**, leveraging **PowerShell** scripts for account provisioning and access management to maintain secure enterprise environments
- Developing automation tools with **Python**, **Tkinter** and **Selenium** to streamline ticket workflows and shipment processing, cutting manual data entry errors and improving processing speed by **75%**
- Authored a **60+** page training guide standardizing support procedures, now adopted as a core onboarding resource for new co-ops across the Desktop Support Services regional teams

Provincial Health Services Authority – Clinical Genetics Technologist | Vancouver, B.C *July 2021 – August 2024*

- Executed high-throughput genetic analyses under standardized protocols, delivering timely and accurate results reporting
- Liaised with IT/vendors to **troubleshoot** LIS and equipment software/hardware issues, reducing operational downtime

TECHNICAL PROJECTS

JobQuest AI – AI-Powered Job App Assistant | *Next.js, AWS Bedrock, ElevenLabs* | GitHub *October 2025 – October 2025*

- Designed a gamified job search assistant with a **Next.js** video-game style UI, increasing engagement via interactive resume reviews and voice-based mock behavioural interviews
- Planned and prototyped AI-powered features (**AWS Bedrock**, **ElevenLabs**), delivering personalized, score-based insights

AniMori – Anime Library Desktop App | *Electron.js, React, Vite, SQLite, Node.js, Jikan* | GitHub *August 2025 – Present*

- Developing a cross-platform **Electron.js** + **React** desktop app with automated metadata retrieval via the **Jikan API**
- Implemented **IPC** channels for client-to-backend connectivity, and optimized **SQLite** database schema with **DBeaver** to streamline data flow and improve query efficiency

SipLy – Beverage Intake Visualization Tool | *React, Spring Boot, H2, Spring AI, Groq* | GitHub *July 2025 – Present*

- Scaling a Java application into a **React** + **Spring Boot** web app with **Recharts** for dynamic beverage intake visualizations
- Designed **RESTful CRUD APIs** with **H2** and secure **BCrypt** authentication, ensuring reliable data storage
- Planning integration of **Spring AI** with **Groq LLaMA3** for personalized beverage recommendations, based off user data

PantryPal – AI Recipe Generator | *React, Vite, Express.js, MongoDB, Groq* | GitHub *March 2025 – March 2025*

- Built an **Express.js** and **MongoDB Atlas** backend to support cloud-based pantry tracking in a full-stack AI recipe generator
- Integrated **Groq's LLaMA 3.3 API** with a dynamically engineered prompt to automate recipe generation from user inputs

EXTRACURRICULARS & LEADERSHIP EXPERIENCE

UBC BCS – BU1DL Mentor | Vancouver, B.C. *August 2025 – Present*

- Mentoring 3 junior CS students, providing guidance on project development with monthly check-ins to maintain progress

TECHNICAL SKILLS

Languages | Python, Java, JavaScript, C++, PowerShell (currently acquiring), SQL, R, HTML5, CSS3

Frameworks/Libraries | React.js, Node.js/Express.js, Next.js, Electron.js, Spring Boot, JUnit Jupiter

Databases | PostgreSQL, MongoDB (NoSQL), SQLite, H2

Developer Tools | Git, GitHub, Netlify, Postman, Vite, Jupyter Notebooks, Groq, Selenium

Cloud & Enterprise Systems | Service Manager 9, Microsoft Azure Active Directory, Mobile Device Management (MDM), Microsoft Endpoint Configuration Manager (SCCM)