

Coleman Lai

Vancouver, BC, Canada | (778) 222-9467 | ccl46@sfu.ca | colemanlai.com | linkedin.com/in/coleman-lai

Skills


Languages: HTML/CSS/JavaScript, TypeScript, SQL, Python, C, C++, C#, R

Programs/Tools: Visual Studio, VSCode, Git, OpenAI API, MCP, Docker, PyTest, WebSocket, Unity, WordPress

Libraries/Frameworks: PostgreSQL, MongoDB, Node.js, React, TailwindCSS, ExpressJS

Other: Agile, Scrum, DevOps, DSA, CI/CD, Software Development Lifecycle (SDLC)


Project Experience

Hermes | Gradio MCP Hackathon | React, TypeScript, Python, Node, Docker, MCP, PostgreSQL |  Jun 2025

- Programmed a [Model Context Protocol-enabled](#) tool that streamlines the process of monitoring APIs by automating asynchronous API calls through dynamic functions, allowing for easy API data recording and performance checking
- Structured [dynamic API handling](#) in Python, including parsing of header tokens and complex user parameters
- Linked functions to SQL database operations, ensuring properly handled edge cases and data security

Spirit of Salmon | C#, Unity |  Nov 2024 – Apr 2025


- Developed a [3D game in Unity](#) to educate on the dangers facing BC Salmon, complete with AI NPCs and predators
- Managed the repository, enforcing [code reviews and good software development practices for efficient work](#)
- Led weekly meetings to plan sprints and evenly divide tasks, while keeping track of reports via meeting minutes

Project SPHENE (Most Original Hack) | DreamHacks | React, TypeScript, Node, OpenAI, MongoDB |  Mar 2025

- Created a backend system leveraging AI to analyze notes from peers and intelligently augment the user's own notes by detecting and incorporating missing concept or explanations, thereby improving completeness and clarity
- Structured an AI [via OpenAI API](#) that creates formatted suggestions in the [users' own personal style](#) for notes
- Utilized MongoDB to [securely store and organize user notes](#), allowing synchronization on the QuillJS text editor

Data Dave | nwHacks | React, TypeScript, Flask, OpenAI |  Jan 2025

- Led development of a [CSV analysis AI assistant](#) with a React-TypeScript frontend and a Flask-WebSocket backend
- Engineered a [context-aware LLM system](#) to prevent AI context loss and hallucinations, ensuring accurate analysis
- Implemented dynamic visualization generation and data analysis using OpenAI API's function calling capability

Be Square (Best AI Hack) | StormHacks | JavaScript, Node, OpenAI, Adobe API |  Oct 2024

- Created an Adobe Express add-on using JavaScript, integrating [OpenAI's API](#) for creative element generation and modification through commands in natural language, enhancing user accessibility and workflow efficiency
- Integrated OpenAI by setting up function calls for [natural language processing](#), connecting via WebSocket
- Worked collaboratively within tight time constraints by using [paired programming techniques](#) to accomplish tasks

Work Experience

Website Enhancement and Administration | iListen Canada Jul – Oct 2024

- Upgraded company website built on WordPress, ensuring [alignment with company values](#) and increasing appeal
- Constructed a well-documented maintenance document, containing results of a [needs analysis](#) of the site
- Injected custom functions and styling using HTML, CSS, JavaScript, and PHP to improve design and functionality

Assistant Camp Coordinator | Children's Summer Camp at CCM Canada Jun – Aug 2019

- Led a large group of children in activities including games and crafts through [clear, age-appropriate instructions](#)
- Developed and taught structured lessons twice weekly with focused activities and exercises, fostering [effective communication](#) through clear, concise explanations and encouraging feedback to gauge comprehension

Education

BSc, Major in Computing Science Sep 2023 – Present

Simon Fraser University, Burnaby, Canada | cGPA: [3.98/4.33](#)

Dean's Honour Roll, President's Honour Roll, SFU Open Scholarship × 3