

Colton Palfrey

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Sydney NSW, Australia

EDUCATION

Bachelor of Science, Computer Science

University of British Columbia • Kelowna, British Columbia

Sep 2019 – August 2024

SKILLS

- **Programming Languages:** Python, Java, C/C#, JavaScript, PHP.
- **Web Development:** React, Flask, Node.js, RESTful APIs, MySQL, PostgreSQL.
- **Tools & Platforms:** Docker, Git, Tailwind, Unity, Apache.
- **Soft Skills:** Project Management, Leadership, Problem-solving, Research, Agile Methodologies, Entrepreneurialism.

WORK EXPERIENCE

Directed Study (Maintenance of a Large Software) Internship

Sep 2024 – Dec 2024

University of British Columbia • Kelowna, British Columbia

Completed a Directed Study on maintaining large software systems under Dr. Bowen Hui, gaining hands-on experience with multi-repository codebases at Teamable Analytics. Developed skills in both front-end and back-end development while improving code quality and adhering to industry standards.

- Worked with **React**, **TypeScript**, and **Django REST framework** for scalable development.
- Enhanced my proficiency in **Python**, adopting a more “Pythonic” approach to problem solving.
- Gain experience with front-end frameworks, including **Tailwind** and **ShadCN**, and contributed to pre-existing large-scale software projects.

GitHub Analysis Research Assistant Internship

Sep 2024 - Present

University of British Columbia • Kelowna, British Columbia

Conducted a GitHub collaboration analysis to extract and analyze student activity data for UBCO software engineering Capstones. Developed automated PDF reports to streamline grading for professors and teaching assistants.

- **Python, REST APIs, Critical thinking, Data Parsing**

Research Assistant Internship

May 2024 – Feb 2025

University of British Columbia • Kelowna, British Columbia

Conducted research under Dr. Ifeoma Adaji, leveraging multiples coding languages and data analysis techniques to drive innovative outcomes. Demonstrated ability to work independently and adapt to new programming languages and tools across multiple projects. Key achievements include:

- Developed a VR educational game using **C#** and **Unity** to promote sustainable waste disposal practices all while giving me experience in **virtual reality development**.
- Conducted quantitative and qualitative analysis of **Stack Overflow** data pre- and post-Large Language Models (LLMs), identifying trends using **Python** for **data visualization** and **SQL**.
- Authored professional **Software Requirements Specifications** and contributed to a publishing a research paper documenting findings.

Assistant GM and General Manager in Training

Sep 2020 - Apr 2024

Domino's Pizza • West Kelowna, British Columbia

As a manager and staff supervisor at dominos I developed a unique range of skillsets all while supporting myself through university. My job Tasks/Responsibilities we're as follows:

- Managed operations and staff, excelling in **labor management**, employee training, customer satisfaction, and inventory control to maintain high profit margins and operational efficiency.

PROJECTS

Capstone Software Engineering Project - AI-Powered Web Development Course Platform

Collaborated with a team of three to develop a microservices-based web platform using **React** and **Node.js**. The platform automates grading of HTML, CSS, and JavaScript files using **OpenAI's ChatGPT API**, streamlining instructor workflows and enhancing student account management. Built for a client in Vancouver British Columbia, the project follows professional software engineering practices.

- **Skills:** React.js, JavaScript, Node.js, Docker, APIs, Microservices, CI/CD, PostgreSQL, NGINX Reverse Proxy, Jest Unit Testing, Integration testing, Express.js, Passport.js.

I-Clicker Clone

Led a team of four to develop an I-Clicker application clone using **Flask** and **Python**, adhering to Agile principles for iterative development. As project leader and Scrum master, facilitated task delegation with GitHub's Kanban board and organized weekly scrums. Implemented a **Digital Ocean MySQL database** and a Bootstrap-based frontend.

- **Skills:** Flask, Python, Agile Project Management, MySQL, HTML, CSS, Database Systems

REFERENCES

- **2x R.A. Supervisor:** Dr. Ifeoma Adaji (ifeoma.adaji@ubc.ca)
- **Directed Study + R.A. Supervisor:** Dr. Bowen Hui (bowen.hui@ubc.ca)
- **Capstone Client and Learnification Technologies Founder/President:** Parsa Rajabi (parsa_r@sfu.ca)
- **Directed Study Mentor/Supervisor:** Opey Adeyemi (opeyadeyemi@gmail.com)