

Nathan Pannell

☎ +1 604 202 2018 | @ contact@nathanpannell.com | 🔗 LinkedIn | 🐙 GitHub | 📁 Portfolio | 📍 Victoria, BC

EDUCATION

University of Victoria

Victoria, BC

B.Sc. of Computer Science (Honours) — GPA: 3.8/4.0

Sep 2021 – Dec 2025

Award of Excellence Scholarship

Jun 2021

Relevant coursework: Object-oriented and functional programming, algorithms, data structures, operating systems, matrix algebra, computer architecture, statistics, calculus, relational databases, numerical methods.

EXPERIENCE

UVic AI

Victoria, BC

Simulation Executive

Jan 2024 – Present, Part-time

- **Co-hosted UVic AI's 2024 hackathon** and developed a framework to process and represent entrants.
- Led team developing a Python simulation environment for the Canadian Undergraduate Conference on AI.

Sidekick Players | [Website](#)

Remote

Front-end Web Developer

Sep 2023 – Present, Freelance

- Designed a modern website in collaboration with the organization's president, using **React** and **Tailwind**.
- **Managed migration** including acquiring a new domain, rerouting previous website, and hosting with Vercel.

AMJ Campbell

Delta, BC

Business Automation Developer

May 2023 – Aug 2023, Internship

- Implemented a suite of automation macros to save **20+ hours of work** weekly, by using VBA to download, process, and present data in detailed spreadsheet reports and ready-to-send emails for clients.
- Improved efficiency by **1 hour per day** by integrating **Google Maps API** to automate mileage cost calculation.

AMJ Campbell

Delta, BC

Accounting Clerk

May 2022 – Sep 2022, Internship

- Developed Excel templates to **reduce errors by 50%**, and introduced **VBA macros** to process CSV reports.
- Executed payroll, accounts payable, and accounts receivable duties for Vancouver, Kelowna, and Victoria.

Niagara Falls Restaurant

Delta, BC

Server

Nov 2018 – Jul 2021, Part-time

- Mastered **clear communication**, customer service, and multi-tasking in a high-pressure environment.

PROJECTS

Multithreaded Train Scheduler | [GitHub](#)

- Implemented multithreading using **C** and the **Pthread** library to simulate a train station coordinator.

Interactive Hackathon Visualizer | [GitHub](#) | [Website](#)

- Created a visualization tool used by UVic AI in their 2024 February UTTT Hackathon, by using **React** and **MongoDB** to broadcast the tournament results to participants in real-time.
- Designed a **base-81 encoding scheme** to effectively represent game positions as strings.

Wildfire Simulation | [GitHub](#)

- Created a cellular automata model of wildfire spread to act as a training environment for UVic AI's reinforcement learning project to be presented at CUCAI this March using **Python** and **OpenAI Gymnasium**.
- Parallelized calculations using **NumPy** vector operations to improve scaling runtime.

Virtual Rubik's Cube | [GitHub](#) | [Website](#)

- Built a fully interactive 3D Rubik's cube with **JavaScript** to explore my interest in puzzles.

SKILLS

Programming Languages: Python, JavaScript, HTML/CSS, SQL, C, Java, VBA, R, Ruby

Software Development: Git, Github, Visual Studio Code, Windows 10/11, Linux, Trello

Technologies: React, Tailwind, JQuery, Wordpress, REST APIs, Excel, Outlook