

NATHAN PANNELL

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EDUCATION

University of Victoria | Victoria, BC

Sept 2021 – Present

B.Sc. (Computer Science with Business Minor; Expected graduation - Dec 2025)

– Award of Excellence Scholarship

WORK EXPERIENCE

Global Talent Technology Co-Op

May 2024 – Present

Teck Resources Ltd, Vancouver, BC | International Mining & Exploration

Co-Op

- Optimized global recruitment processes by managing a **suite of 18 applications**, significantly increasing efficiency.
- Built a custom chat bot with **Copilot** and **Power Automate** to reduce support ticket volume by **20%**.
- Migrated VM-based **Python** automation script to **Azure Function Apps** to improve reliability and up-time.

Automation Developer Co-Op

May 2023 – Aug 2023

AMJ Campbell, Delta, BC | Nation-wide Logistics

Co-Op

- Created automations with **REST APIs**, **VBA**, and **Excel** to improve efficiency by **10%** within the accounting department.
- Streamlined generation of billings and reports for accounts such as Wayfair and Crate & Barrel.
- Handled **accounts payable** and **payroll** management for Vancouver, Victoria, and Kelowna during a staff member's leave.

LEADERSHIP EXPERIENCE

Simulation Project Lead

Jan 2024 – Present

UVic AI, Victoria, BC | Student-run Educational Club

Volunteer

- Led AI-driven wildfire simulation, presented in Kingston, Ontario at the **Canadian Undergraduate Conference on AI**.
- **Hosted university-wide hackathon** with a custom submission and visualization pipeline, with sponsorship from IEEE.

PROJECTS

Wildfire Simulation with AI Agents | [GitHub](#)

- Created a cellular automata model of wildfire spread integrated with the **OpenAI Gym API** for an AI Conference.
- Identified a novel wildfire simulation approach, including heuristic **AI firefighter agents** within the simulation itself.
- Collaborated with Reinforcement Learning and Domain Expert teams to ensure interoperability and accuracy.

Interactive Hackathon Visualizer | [GitHub](#)

- Developed a real-time visualization tool with **React** and **TailwindCSS** for the UVic AI Club 2024 Hackathon.
- Designed a base-81 **encoding scheme** to effectively represent temporal-positional data as strings.

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

- Built an interactive 3D Rubik's cube with **JavaScript** and CSS rotations, responsive on **mobile** and **desktop**.

SKILLS

Programming Languages: Python, Java, PostgreSQL, JavaScript, HTML, CSS

Development Tools: REST APIs, Git, Linux, Visual Studio Code, React, Tailwind

Office 365 Tools: Power BI, Power Automate, Azure DevOps, Excel, Outlook