

## EDUCATION

**University of British Columbia**

*Bachelor of Science in Computer Science*

**Expected Graduation May 2027**

**University of British Columbia**

*Bachelor of Applied Science with Distinction in Civil Engineering*

**Graduated May 2023**

## WORK EXPERIENCE

**Graham Construction & Engineering, Vancouver, BC**

**January 2022 – Current**

**Engineer-in-Training**

- Developed an automated data tracking system by creating Microsoft Excel tools with Visual Basic for Applications to streamline project documentation management, improving efficiency in record-keeping
- Created comprehensive technical documentation and reports to facilitate effective communication between internal teams and clients, ensuring alignment and smooth project execution
- Performed data analyses to extract and process information from technical drawings and contract specifications to perform resource estimation and optimize material & equipment usage
- Demonstrated strong attention to detail by conducting inspections and meticulously tracking progress to identify and address bottlenecks to ensure project milestones were met

**Traylor Bros. Inc., North Vancouver, BC**

**May 2021 – August 2021**

**Field Engineer Intern**

- Managed and analyzed data for the Tunnel Boring Machine by monitoring progress and production trends, often generating visual graphs and charts, to make data-driven decisions and draft reports
- Processed and manipulated data logger outputs, for concrete thermal monitoring, to identify trends and create visual conclusions to optimize concrete curing processes
- Performed QA testing on operational data from the Slurry Treatment Plant, tracking changes and identifying optimization opportunities to enhance the efficiency and effectiveness of the Tunnel Boring Machine

**United Lock Block LTD, Richmond, BC**

**July 2020 – December 2020**

**Research and Development Co-op Student**

- Developed detailed 2D and 3D visual models using AutoCAD to represent complex systems and technical solutions, enabling engineers to evaluate designs and improve system functionality
- Designed and fabricated tools and prototypes using readily available materials and 3D printing technology (Ultimaker Cura), improving workflow productivity and performance by providing innovative solutions in a timely manner

## TECHNICAL PROJECTS

**Occupancy Detection ML Model, Python, Visual Studio Code**

**January 2023 – April 2023**

- Developed an occupancy detection machine learning model to optimize building energy consumption, employing techniques such as data pre-processing, model training, and testing with decision trees, random forest, and artificial neural networks (ANN)
- Enhanced model performance by evaluating and refining predictive accuracy using key metrics such as F1 Score, RMSE, and accuracy, ensuring improved model robustness and predictive capabilities

## TECHNICAL SKILLS

**Languages:** C, R, Python, DrRacket, SQL, JavaScript, HTML/CSS

**Libraries:** Pandas, NumPy, Matplotlib

**Courses:** CS50: Introduction to Computer Science | Harvard, Tech Stewardship Practice Program