

Brodie Gould

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EDUCATION

Bachelor of Electrical Engineering (4th year) (A- Current Average)

Jan 2021 – Apr 2023

University of Victoria, Victoria BC

- Electives include Applied Cryptography, Practice of Information Security and Privacy, Computer Vision, Blockchain Technologies, Artificial Intelligence, Communication Networks, Numerical Analysis, Microprocessor-based systems, Mechatronics, Public Speaking and the Engineering Capstone Project

Electrical & Computer Engineering Bridge to UVic – Advanced Diploma (A- Average)

Jan 2020 – Dec 2020

Camosun College, Victoria BC

Electrical Engineering Technology – Advanced Diploma (A- Average)

Sep 2015 – Sep 2018

Georgian College, Barrie ON

EXPERIENCE

Junior Engineer, Co-op

Sep 2022 – Current

Innovation, Science and Economic Development Canada (ISED), Government of Canada, Ottawa ON (Remote)

- Led an R&D initiative for a cybersecurity proof of concept, using **Docker**, **AWS**, and **Open Source Software**
- Conducted cybersecurity research in software supply chain, cloud infrastructure, ransomware, vulnerabilities and incidents to help guide division initiatives; reporting in a bi-weekly 2-page newsletter
- Assisted a public-private forum of 25+ members to devise risk management practices for cybersecurity and internet resilience; and help Canada plan for disruptive technologies

Electrical Design Technologist, Consultant

Nov 2018 – Dec 2019

RF Binnie & Associates, Burnaby BC

- Mediated 20+ construction projects between customers, suppliers, engineers and contractors
 - Created project build packages and instruction drawings for construction, bidding and project management, with projects ranging from \$50,000 - \$3,000,000
 - Performed data analysis, modelling a pump stations behavior to provide operation recommendations
 - Led a pump station repair project, saving \$300,000+ by scheduling labour and equipment reuse
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PROJECTS

Co-lead software engineer, Differential Cryptanalysis Attack (UVic)

May 2022 – Apr 2022

- Co developed and wrote a cryptanalysis attack to recover a secret key from a 16-bit private-key cryptography scheme similar to AES in under 5000 iterations, using **Python**

Lead software engineer, Sealed Envelope Auction Smart Contract (UVic)

Jul 2022 – Aug 2022

- Designed and implemented code to model the functionality of a sealed envelope smart contract utilizing cryptography to disguise transactions; programmed in **Solidity**

Web Development, Work, Personal, School and JABC websites

- Style and build websites using **HTML**, **CSS**, with **WordPress** and **Drupal**

Jan 2022 – Current

VOLUNTEER EXPERIENCE

Project Manager, JABC and HighTechU

Jan 2023 – May 2023

- Manage program operations and volunteers, as well as teach JABC company program helping highschool students develop skills in business management and operation, entrepreneurship and programming
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PAST SKILLS

AWS, Bash, C, C++, CSS,
Docker, Excel, Git, HTML,
Linux/Unix, MATLAB, Python,
R, Solidity

ACTIVITIES AND INTERESTS

- Active member in the UVic's Cybersecurity Club, with weekly meetings about ethical hacking; and the Financial Investment Group, with meetings about markets and business performance
- In my spare time I enjoy reading, running, caving, bouldering, and travelling