Brodie Gould

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EDUCATION

Bachelor of Electrical Engineering (4th year) (83% Current Average) *Jan 2021-May 2023*
University of Victoria, Victoria, BC

- Past coursework include Applied Cryptography, Mechatronics, Communication Networks, Numerical Analysis and Microprocessor-based systems. Current coursework includes Blockchain Technologies, Advanced Programming Techniques for Robust and Efficient Computing (C++), and Artificial Intelligence

Electrical & Computer Engineering Bridge to UVic – Advanced Diploma (82% Average) *Jan 2020-Dec 2020*
Camosun College, Victoria BC

- Past coursework includes Data Structures & Applications, Programming for Engineers, Discrete Structures in Engineering, Probability & Statistics for Engineers, and Mathematics

Electrical Engineering Technology – Advanced Diploma (80% Average) *Sept 2015-Sept 2018*
Georgian College, Barrie ON

- Past coursework includes Applied Statistics, Project Management, Networking, and Advanced PLC's

EXPERIENCE

Automation and Design, Internship *May 2021 – Aug 2021*
Barrie Welding & Machine, Barrie ON

- Designed and programmed simultaneous industrial automation projects using AutoCAD, and RSLogix with projects ranging from $10,000 - $1,000,000
- Generate design drawings saving the engineering department 20% of total design time

Electrical Design Technologist, Consultant *Nov 2018 – Dec 2019*
RF Binnie & Associates, Burnaby BC

- Mediated multiple 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
- Led a pumpstation repair project, saving $300,000+ by scheduling labour and equipment reuse

SCHOOL PROJECTS

- **Co-lead software engineer, Differential Cryptanalysis Attack** *April 2022*
  - Co developed and wrote a cryptanalysis attack where we successfully recovered a secret key from a 16-bit private-key cryptography scheme similar to AES in under 5000 iterations, using Python
- **Lead software engineer, Mechatronics Efficient Assembly Line** *April 2022*
  - Designed and implemented code for an assembly line process that classified and sorted objects. Improved efficiency by implementing a sliced S-Curve to speed up the sorting turntable up to 50%. Achieved runtime of 32 seconds in testing, which placed in the top 3 groups; using embedded C

SKILLS

- Proficient:
  - C
  - CSS
  - HTML
- Semi-Proficient:
  - Bootstrap
  - C++
  - Git
  - Linux
  - MATLAB
  - Python
  - R

ACTIVITIES AND INTERESTS

- Member in the University of Victoria's competitive programming club, doing weekly coding challenges to optimize runtime
- Member in the University of Victoria's Investment Group, with routine meetings to analyze companies, and discuss trading strategies
- Member of the Cryptocurrency Group, discussing new technology
- I also enjoy reading, playing sports, travelling, and exploring entrepreneurial ventures

References available upon request

Brodie Gould
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