Brodie Gould

ELECTRICAL ENGINEERING UNDERGRADUATE STUDENT
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EDUCATION

Electrical Engineering - Bachelor of Engineering (4th year) (83% Current Average) *2yr, 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, and Artificial Intelligence

Electrical & Computer Engineering Bridge – Advanced Diploma (82% Average) *1yr, 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) *3yr, Sept 2018*
Georgian College, Barrie ON

EXPERIENCE

Automation and Design, Internship *4mo, 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 *13mo, Nov 2018 – Dec 2019*
RF Binnie & Associates, Burnaby BC

- Worked in a consultant role client-facing 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
- Over sought a pumpstation repair project, saving $300,000+ by scheduling labour and equipment reuse

SCHOOL PROJECTS

- **Co-lead software engineer, Differential Cryptanalysis Attack:**
  - Co-developed and wrote a cryptanalysis attack where we successfully recovered a secret key from a 16-bit private-key cryptography scheme like AES in under 5000 iterations, using Python
- **Lead software engineer, Mechatronics Efficient Assembly Line:**
  - 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%. Tested runtime 32 seconds, which lands in the top 3 groups; using embedded C

SKILLS

- C (proficient)
- C++ (prior experience)
- Python (prior experience)
- HTML (proficient)
- CSS (proficient)
- Bootstrap (prior experience)
- Git (prior experience)
- MATLAB (proficient)
- R (prior experience)
- Linux (prior experience)

ACTIVITIES AND INTERESTS

- When I'm not studying, you can find me in the outdoors (motorcycling, climbing, surfing, skiing), travelling (South East Asia was my favourite), learning about programming and finance (Object Oriented Programming and Blockchain Technology), playing sports (hockey, beach volleyball), and reading daily
- Active member in the University of Victoria's Investment Group, and the Cryptocurrency Group

References available upon request

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