Benjamin Austin

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✓ Victoria, BC♦ benaustin.ca

Education >

BSEng, Software Engineering at the University of Victoria

2017 - Present

Expecting graduation: August 2022.

Technical Competencies ✓

- · Languages: C, C++, Python, Go, JavaScript, CSS, HTML, Assembly, LaTeX.
- · Tools: AWS, Git, Docker, gRPC, jQuery, Wireshark.
- · Databases: PostgreSQL, etcd.

Work Experience ✓

Junior DevOps Engineer Co-op at MarineLabs

Sept 2021 - Present

Software Developer Co-op at National Research Council Canada

Jan - Apr 2021

- Researched and prototyped a collection of software systems in C++ to schedule, execute, and store the data of solar observations for the ongoing ARTTA-4 project at the Dominion Radio Astrophysical Observatory (DRAO).
- Utilised a key/value database and its features to dynamically monitor a subset of observation requests,
 reducing database traffic while simultaneously allowing for real-time observation schedule updates.
- Consolidated communications between unique types of endpoint devices by implementing JSON over HTTP communication with RESTful API's, allowing the executor to communicate with multiple types of devices via a single protocol.

Quality Assurance Analyst Co-op at ACD Systems

Jan - Aug 2019

- Performed a variety of quality assurance testing on a wide range of web services throughout their development lifecycle, providing confidence in product releases, updates, and maintenance.
- Tested functionality, ergonomics, and quality of components during a sitewide redesign to increase maintainability and improve consistency across locales.
- Bridged communication between marketing and development teams to improve efficiency and maintain awareness of project progress and needs.

Technical Projects ∨

128-Bit RSA Cryptography Implementation

2021

• Researched, implemented, and optimized a 128-bit implementation of the RSA cryptography algorithm on a 32-bit ARM processor using a variety of optimization techniques and a proposed hardware assist.

Distributed Systems and Data Privacy

2021

 Contributed prototype implementations and research to propose innovative solutions using distributed systems while simultaneously aiming to preserve the privacy of sensitive generational knowledge.

Brain Tumour Detection with Machine Learning

2021

 Helped design, train, and optimize a simple machine learning model to recognize brain tumours in MRI brain scans.