Mac Burton

SOFTWARE ENGINEER

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Experience

Aethera Technologies | Full-Stack Software Engineer

Mar 2024 - Present

- Developed and deployed full stack software solutions, utilizing Python libraries to create middleware for TCP-based communication between hardware and software systems.
- Designed and implemented user interfaces for control systems, streamlining user interactions with embedded hardware
- Integrated signal processing and control algorithms to enhance the performance of hardware systems and facilitate seamless data transmission.
- Created and maintained detailed design documentation and conducted thorough system-level testing, ensuring robust and reliable software for embedded platforms.

Department of National Defense | CAF Army Musician

Jun 2019 - Present

- Provided musical accompaniment for military ceremonies and public performances, representing the Canadian Armed Forces (CAF) in both formal and community events.
- Delivered IT support to CAF members during full-time summer employment, improving issue resolution efficiency and reducing dependency on external IT services.
- Appointed Safety 2IC (Second-in-Command) due to demonstrated professionalism, leadership, and commitment to military protocols.
- Ensured compliance with safety regulations during training and performances, enhancing operational readiness and safeguarding personnel.

Lockheed Martin | Technical Co-op - Software - CSC

Jan 2022 - Apr 2022 May 2020 - Dec 2020

- Developed and deployed Java software for warship systems, ensuring high-quality code met internal standards and testing protocols.
- Collaborated in Agile Scrum teams, utilizing SVN, Jenkins, and Redmine to ensure continuous integration and smooth delivery of features.
- Translated user stories from stakeholders into software solutions, contributing to cutting-edge naval defense technology.
- Conducted code reviews and peer testing, supporting the team's delivery of impactful and dependable software

Education

Dalhousie University - Bachelor of Computer Science

Oct 2023

Dalhousie University – Certificate of User Experience Design and Evaluation

Oct 2023

Personal Project

Personal Portfolio Website v1.0 & v2.0

Jun 2024 - Sept 2024 Sept 2023 - Dec 2023

- Designed, programmed, and illustrated a fully custom portfolio website to showcase projects, ensuring both aesthetics and functionality.
- Developed the first version using HTML, CSS, and JavaScript, providing a responsive and userfriendly interface.
- Built an interactive microgame using JavaScript, enhancing user engagement and showcasing advanced programming skills.
- Converted the second version to PHP and integrated jQuery for dynamic content, while self-hosting the website to ensure control over performance and uptime.

Extracurricular

Volunteer Musician – Atlantic Sound Machine	Sept 2023 - Present
Volunteer Musician – Chebucto Symphony Orchestra	Sept 2022 - Present
Culinary Support Volunteer – Loaded Ladle	Sept 2022 - May 2023
Founder and President – Dalhousie Trading Card Game Society	Sept 2019 - May 2023

Skills & Abilities

C, C#, Java, Python, HTML, CSS, JavaScript, PHP, Kotlin, XML, R, Windows, macOS, Linux (Red Hat), React, BeautifulSoup4, JFrame, JQuery, Jsoup, PyQt5, Qt Designer, MySQL, SQuirreL, Firebase, Docker, Jenkins, Git, SVN, Unity Collab, Apache, Gradle, Make, PuTTY, .Net Reflector Compiler, VirtualBox, Wireshark, Bitbucket, Jira, Redmine, Trello, Blender, Figma, Emacs, Sublime Text, Vi, Android Studio, Visual Studio Code, Eclipse, IntelliJ, PyCharm, Mbed Studio, Unit Testing, Integration Testing, Regression Testing, Acceptance Testing, White Box Testing, Black Box Testing, Agile, Scrum, Kanban, Waterfall.

Adaptability, Attention to Detail, Communication, Conflict Resolution, Creativity, Leadership, Problem Solving.

Scholarships & Awards

Nokia 3310 Jam 6 – Top 5% in Innovation	Feb 2024
Global Game Jam – People's Choice Award: Most Creative	Jan 2024
Department of National Defense – Corporal Promotion	Apr 2023
Loaded Ladle – Feature Volunteer	Apr 2023
Global Game Jam – Ubisoft's Choice Award	Feb 2023
Battlesnake Tournament – Semi Finalist	Jan 2023
Greenlight Jam – 1 st Place Best Plan for Diversifiers	Jun 2022
Atlantic Game Jam – 3 rd Place Overall	Feb 2022
Atlantic Game Jam – 1 st Place in Mechanics	Feb 2022
Dalhousie University – Sexton Scholar	Aug 2021
Lockheed Martin – Thanks Award	Aug 2020
C. H. Campbell Memorial – Entrance Scholarship	Sept 2018