

BRIANNA MCDONALD

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EDUCATION

Memorial University of Newfoundland
Bachelor of Science (Honours) in Computer Science
GPA: 4.0

September 2018 - April 2023
St. John's, NL

EXPERIENCE

Embedded Software Developer – Mysa May 2022 - August 2022

- Software development using C, JavaScript, and AWS for smart, connected home thermostats.
- Migrated software workflows from Circle CI to GitHub Actions.

Programmer – Compusult Limited May 2021 - April 2022

- Developed the award-winning MVP for the Parkinson's Remote Interactive Monitoring System (PRIMS) in a team of 2, which has helped a MedTech startup raise \$200,000+ in funding.
- Worked extensively with depth-sensing cameras and hand, face, and body-tracking software.
- Software and web development using Reactjs, Nodejs, Python, Java, AWS, and SQLite.

Web Developer – NL Eats June 2020 - January 2021

- Implemented the front-end of an inventory management website using Reactjs with a team of 10+ members.

Tutor – MUN Computer Science Help Centre February 2020 - April 2020

- Tutored other students in areas such as programming, algorithms and data structures, and other Computer Science fundamentals.

Graphic Designer – Ready for STEM September 2019 - December 2019

- Edited photos using GIMP and created designs for newsletters and event posters.

TECHNICAL SKILLS

Languages & Frameworks Libraries Other

Python | JavaScript | C++ | C# | C | Java | React | Redux | Nodejs | HTML/CSS
Numpy | Matplotlib | Pandas | OpenCV | Scikit-learn | Mediapipe | RealSense
Git | Jira | Figma | Unity | MongoDB | SQLite | Jupyter Notebook | AWS | Bash

HONORS & AWARDS

Science Co-op Student of the Year Award – MUN 2022

Best Talk in the "Innovation, Technology, and Exploration" Category (Undergrad) – Scientific Endeavours in Academia Research Conference 2022

Dean of Science Book Prize for Computer Science – MUN 2020-2021

Awarded to one student in the department of Computer Science per year on the basis of demonstrated academic excellence in the field.

2nd Place in Hack Frost NL Hackathon 2021

Dean's List – MUN 2019-2020 & 2018-2019

DISSERTATIONS

Using Image-Based Tracking for Smartphone-Based Interaction in VR 2022

Implemented a technique that allows the user to interact with objects within virtual reality (VR) using touch screen and tilt controls on their smartphone, along with two demo applications ([PDF](#)).

PROJECTS

Portfolio Website ([Link](#)) 2020-2022

My personal portfolio website made using Reactjs and Material UI. Showcases the projects listed here as well as the full list of my other projects that further display my skills.

Parkinson's Remote Interactive Monitoring System (PRIMS) ([Link](#)) 2021-2022

A system that patients can use at home to monitor Parkinson's symptoms. The software includes custom algorithms that automatically rate the severity of symptoms present during motor exercises performed in front of depth-sensing cameras. Developed the MVP in a team of 2 using JavaFX, SQLite, and Python.

NL Life – 2nd Place Winner in Hack Frost NL Hackathon ([Link](#)) 2021

A demo virtual tourism platform for Newfoundland. Created using Reactjs and Chakra UI for the Hack Frost NL Hackathon where my team came in 2nd place out of 30+ teams.