BRIANNA MCDONALD

⚲ St. John's, NL

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⊙ github.com/briannamcdonald

in briannamcdonald

TECHNICAL SKILLS

Languages & Frameworks:
Python, JavaScript, C++, C#, Java, Reactjs, Nodejs, Redux, HTML, CSS

Tools: Git, Jira, Figma, Unity, MongoDB, SQLite

OS: MacOS, Windows, Linux

EDUCATION

Memorial University – Bachelor of Science (Hons) in Computer Science

September 2018 – present

4.0 GPA

HONOURS / AWARDS

Dean of Science Book Prize for Computer Science 2020-2021

2nd Place in Hack Frost NL Hackathon, 2021

Dean's List 2019 – 2020

Dean's List 2018 – 2019

Electoral District Scholarship, 2018

Nalcor Energy Family Scholarship, 2018

Robert Gillespie Reid Memorial Scholarship, 2018

Valedictorian at Bay d'Espoir Academy, 2018

Governor General Medal, 2018

EXPERIENCE

May 2021 – present

Programmer – Compusult Ltd.

- Developed software and web applications using Reactjs, Nodejs, AWS, Python, Java, and SQLite.
- Worked extensively with depth-sensing cameras and hand and body tracking software.
- Used Git and Jira for project management.
- Worked both independently and as part of a team.

June 2020 – January 2021

Web Developer – NL Eats

- Worked on implementing the front-end of a web application using Reactjs with a team of 10+ members.
- Used Git and Jira for project management.
- Reviewed, tested, and debugged other's code.

February 2020 – April 2020

Tutor – MUN Computer Science Help Centre

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

September 2019 – December 2019

Graphic Designer – Ready for STEM

- Edited photos for a newsletter using GIMP.
- Designed and created event posters.

July 2019 – August 2019

Green Team Leader – Conservation Corps

- Supervised three other students as a team leader.
- Edited and maintained NAIA's website.
- Organized data and created reports using Microsoft Excel and Microsoft Word.
- Wrote magazine articles for NAIA's Magazine.

May 2019 – July 2019

Summer Student – Newfoundland & Labrador Hydro

2015 – 2018

Ad Designer – St. Alban's Community Channel TV

PROJECTS

The full list of my personal projects can be found on my GitHub: **github.com/briannamcdonald**

Portfolio Website – briannamcdonald.me/portfolio-website

My personal portfolio website made using Reactjs and Material UI. Includes a stylish landing page, about section, list of projects, and a contact page, all with a fully responsive design.

Showcases the projects listed here as well as some smaller projects that further display my skills.

NL Life (2nd Place Winner in Hack Frost NL Hackathon) – nl-life.vercel.app

A demo virtual tourism platform for Newfoundland. Created using Reactjs and Chakra UI for the Hack Frost NL Hackathon in 2021 where my team came in 2nd place out of 30+ teams.

COVID-19 & Economic Tracker – github.com/briannamcdonald/covid-19-and-economic-tracker

A data visualization application that provides direct comparisons between COVID-19 and economic data for Canada in 2020. It was created using the MERN stack (MongoDB, Express, Reactjs, and Nodejs) for the purpose of allowing users to visually see the impact of the pandemic on the Canadian economy.

Generative Design in Minecraft Competition Entry - youtube.com/watch?v=eSV2Y1DuTAw

Python code that builds a procedurally generated village in the video game Minecraft.

The algorithm places houses in found flat areas of the given terrain, creates walkable paths between them, and then places fences and other decorative items around the village. It adapts to the terrain by adjusting the block types to match different biomes, avoiding large height changes in paths, and placing platforms above water.

To-Do List React App - briannamcdonald.me/react-to-do-list

A to-do list web application I developed as a personal project to practice my UI design and web development skills. Made using Reactjs, Redux, and Chakra UI. Features include the ability to sort tasks by done, to-do, or all, a fully responsive design, and multiple color modes.

Academic Projects – briannamcdonald.me/portfolio-website/#/academic-projects

A collection of some of my recent academic projects related to artificial intelligence and image processing. Includes pathfinding using both Q-learning and A* heuristic search, a Connect 4 bot, and the implementation of various thresholding techniques for images.

Videos and more details of the projects are available at the link provided.

References Available Upon Request