Bradley Herrera Contreras

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Skills

Programming JavaScript, TypeScript, Python, C++, SQL, R, CSS, HTML
Tools React, Node.js, Next.js, SASS, SCSS, Git, D3.js, InfluxDB, PostgreSQL, Material UI, Docker

Experience

Full Stack Software Developer
Remote
Arcturus Networks
May 2023 - Aug 2023
- Developed a real-time video analytics dashboard utilizing **socket.io** and **React** on the Embedded Machine Vision team.
- Enabled dynamic updates of **time-series data** by integrating the backend server with **InfluxDB** and **PostgreSQL**.

Performance Analyst
Remote
Desjardins
Jan 2022 - Apr 2022
- Performed **exploratory data analysis** on over 20 large-scale datasets to analyze and quantify business performance.
- Shared over **10 scripts** in **SQL** and **SAS** that streamlined data manipulation **saving 25%** more time.
- Optimized financial investments of over **$50,000** by delivering **10 presentations** highlighting data-driven insights.

Projects

Visual Scroll Article: Explore the STEM Gender Gap %
- Designed a scrollytelling article using **React** and **TypeScript** that explores the STEM gender gap across the world.
- Created **7 interactive data visualizations** using **D3.js** that allow users to explore the data with custom widgets.

Waterloo Data Science Club Website %
- Launched the club website using **React** and **Next.js** while leveraging **Git** for version control across the team.
- Accelerated future updates by **50%** using **JavaScript** and **APIs** to dynamically cast data and automate social media.
- Implemented **Material UI**, **SASS**, and React components in design decisions to contribute **high quality code**.

Interactive Glucose Visualization Dashboard %
- Developed the pre-processing of over 2 years of my Type 1 Diabetes glucose data using **Python Pandas**.
- Created an **interactive dashboard** including 3 plots, 1 interactive table, and 2 search widgets using the Panel library.

Leadership

Frontend Developer %
Waterloo, ON
Hack the North
Mar. 2023 – Present
- Building the Hack the North website and hacker dashboards using **React** and **TypeScript** for over **1,000 hackers**.

Tech Lead
Waterloo, ON
Waterloo Tech+
Jan. 2023 – Present
- Redesigned a **Python** program to match over **40 students** every term with mentors based on common interests.
- Guided cross-functional collaboration for the redesign of Tech+'s backend portal to improve the platform for users.

Lead Developer
Waterloo, ON
Waterloo Data Science Club
May 2022 - Jan 2023
- Founded the Development Team to build technical community projects **increasing student engagement by 30%**.
- Led a team of **7 developers** in the creation of a modern website and Discord Bot to boost social media interactions.

Vice President of Finance
Waterloo, ON
Waterloo Data Science Club
Aug 2021 - Jan 2022
- **Reallocated over $2,500** in spending to successfully organize a Club hackathon with over **50 participants**.
- Delivered clear and efficient financial reporting which **improved stakeholder satisfaction by 40%**.

Education

University of Waterloo & Wilfrid Laurier University
Waterloo, ON
Bachelor of Computer Science & Bachelor of Business Administration
2020 - 2025
- Relevant Coursework: Data Structures, Algorithms, Object Oriented Software Development, Operating Systems
- Languages: **English** (Native), **French** (Fluent), **Spanish** (Fluent)