# **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** 

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 user experience.

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 2020 - 2025

Bachelor of Computer Science & Bachelor of Business Administration

- Relevant Coursework: Data Structures, Algorithms, Object Oriented Software Development, Operating Systems
- Languages: **English** (Native), **French** (Fluent), **Spanish** (Fluent)