## Lucas Harvey

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## Software Engineering at University of Waterloo



**Programming Languages:** Python, R, C, JavaScript, HTML, CSS, PHP, MySQL, Swift, Objective-C, C

**Tools and Frameworks:** R Studio, Git, XCode, React.js Fluent in English and French Languages:

## **WORK EXPERIENCE**

IntelliSports

Research Intern

intellisports.xyz

R, R Studio, Objective-C, XCode

Spring 2018

- Explored the physics behind the sport of curling for the development of a performance-based mobile application
- · Automated the data analysis of large data sets of gyroscope, accelerometer and magnetometer readings using linear regression in R Studio
- · Discovered new findings regarding the motion of the curling stone never observed in the research community

Nexchange

Lead Developer and Founder

nexchange.ca 2017-2018

JavaScript, HTML, CSS, PHP, MySQL

- · Founded a web-based service that supports students with learning difficulties and saves an average of 15 hours per week of manual labour
- Developed a customized front-end experience using JavaScript and HTML
- Built a back-end in PHP consisting of over 30 endpoints interacting with a MySQL database
- · Implemented secure authentication using JSON Web Tokens from scratch
- · Created a mobile-friendly user interface using dynamic CSS

## </> PROJECTS

VisionLock

Python, OpenCV, Dlib

Fall 2018

· Developed a home security system capable of performing facial recognition, unlocking a door and greeting the resident with text to speech conversion

**CLIMotion** 

JavaScript, Shell

Hack the North

2018

· Created the user interface for a project involving computer vision which allows users to interact with the command line using physical gestures

GraphGEN

JavaScript, HTML, CSS

Spring 2017

 Developed a web-based mathematical graphing application capable of plotting points, drawing functions and determining the best linear fit for a given data set



Bachelor's of **Software Engineering** 

University of Waterloo

2018 - Present

President's Scholarship of Distinction

**Diploma of College Studies** 

John Abbott College

3.95 GPA

2016-2018

R Score of 37.5 and Dean's List Recipient (Top 0.5% of school)