# Lucas Harvey

/LucasHarve lucasharvey.con

/lucas-harvey

## lucas.harvey@uwaterloo.ca

#### Software Engineering at the 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

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

Nexchange

Lead Developer and Founder

nexchange.ca

JavaScript, HTML, CSS, PHP, MySQL

2017 - 2018

- · Founded a web-based service that supports students with learning difficulties by providing them with class notes 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 which interacts 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

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

2018

**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

#### **EDUCATION**

Bachelor's of **Software Engineering**  University of Waterloo

3.95 GPA

2018 - Present

Dean's Honours List Recipient

**Diploma of College Studies** 

John Abbott College

2016 - 2018

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

Valedictorian