





Lucas Harvey

Software Engineering at University of Waterloo

/LucasHarvey 
lucasharvey.me 
/lucas-harvey 
lucas.harvey@uwaterloo.ca 

SKILLS

Programming Languages: Swift, Objective-C, JavaScript, HTML, CSS, PHP, MySQL, C, Shell, R
Tools and Frameworks: XCode, React, Apache, R Studio, Git
Languages: Fluent in English and French

WORK EXPERIENCE

- Nexchange**
nexchange.ca
2017-2018
Lead Developer and Founder
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**
- IntelliSports**
intellisports.net
Spring 2018
Research Intern
R, R Studio, Objective-C, XCode
 - 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 **R Studio**
 - Discovered new findings regarding the motion of the curling stone never observed in the research community

PROJECTS

- VisionLock**
Fall 2018
Python, OpenCV, Dlib
 - Developed a home security system capable of performing **facial recognition**, unlocking a door and greeting the resident with text to speech conversion
- CLIMotion**
Hack the North
2018
JavaScript, Shell
 - Created the user interface for a project involving **computer vision** which allows users to interact with the command line using physical gestures
- GraphGEN**
Spring 2017
JavaScript, HTML, CSS
 - 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**
2018 - Present
University of Waterloo
3.95 GPA
President's Scholarship of Distinction
- Diploma of College Studies**
2016-2018
John Abbott College
R Score of 37.5 and Dean's List Recipient (Top 0.5% of school)