# **Lucas Harvey**

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# s-harvey

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# Software Engineering at the University of Waterloo



#### **SKILLS**

Programming Languages: SQL, PHP, Objective-C, Javascript, HTML, CSS, Python, C++, C, Swift, R

Tools and Frameworks: XCode, MySQL, Git, React Native, Expo, React.js, R Studio



#### **WORK EXPERIENCE**

## IntelliSports

## Full Stack Developer Intern

intellisports.ca

Objective-C, XCode, PHP, MySQL

Summer 2019

- Responsible for end-to-end development of a leveling up system to incentivize long-term user engagement through gamification.
- Redesigned main component of the app for an improved user experience, resulting in a 30x increase in feature use.
- Decreased leaderboard load time by 500% by optimizing SQL queries and implementing infinite scrolling for dynamic data.

#### IntelliSports

# Research Intern

intellisports.ca

Objective-C, XCode, R, R Studio

Spring 2018

- · Automated analysis of large data sets of sensor 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.

# </> PROJECTS

#### **PartyFinder**

React Native, Expo, Firebase

partyfinder.ca Summer 2019

- Built crowdsourced mobile app to help students find events happening near them with live ratings.
- Utilized various Google APIs to propose relevant address suggestions and locate events on a map.
- Led a team of programmers, designers and marketers and amassed over 1000 downloads in two weeks.

#### VisionLock

Python, OpenCV, Dlib, Raspberry Pi

Fall 2018

- Developed home security system capable of unlocking a door with a servo motor and greeting the resident by name with text to speech conversion.
- Leveraged OpenCV, Dlib and Haar Cascades to perform facial recognition efficiently within the constraint of limited computational resources onboard the Raspberry Pi.

#### Nexchange

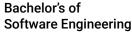
JavaScript, HTML, CSS, PHP, MySQL

nexchange.ca 2017 - 2018

- Founded 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.
- Implemented secure authentication from scratch using custom JSON Web Tokens.
- · Crafted mobile-friendly user interface using responsive CSS.
- Received \$3,000 in entrepreneurship prizes and won the regional level of the OSEntreprendre competition.



## **EDUCATION**



2018 - Present

University of Waterloo

90.67% Cumulative Average Dean's Honours List Recipient (2x)