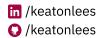
# **Keaton Lees**

klees@uwaterloo.ca keatonlees.me/portfolio



# **Experience**

#### **Self Employed**

May. 2021 - Aug. 2021

# Ballard Power Systems

Aug. 2020 - Dec. 2020

# Ballard Power Systems

Jan. 2020 - Apr. 2020

# **Projects**

#### **Chromation**

Unity3D, C#

#### **Jarvis Smart Clock**

Flask, HTML, CSS, Javascript, Python, Raspberry Pi

#### **Puppr**

HTML, CSS, Javascript, Python, Flask, Firebase

### Arcade Donkey Kong

Java, HTML

#### Full-Stack Developer 2 0

Developed Octo-Do, a flexible to-do list web application that allows a user to create, edit and delete tasks using React, Node.js and MySQL

Implemented user authentication using Firebase and deployed completed application to Heroku

#### **Systems and Controls Engineer**

Developed automated Python scripts to update and maintain sensor database of over 300 fuel cell modules that will be used by a production team of 20 members

Responsible for assembling and testing over 35 unique components for use in prototype fuel cells

#### **Systems Engineer**

Developed programs to interface with hydrogen fuel cells using Arduino and Raspberry Pi microcontrollers to decrease testing times by 25%

#### Personal Project **Q**

Designed and developed Chromation, a first-person puzzle-parkour game using Unity and C#

Constructed intriguing levels by implemented the ability to pickup, drop and combine coloured spheres to access new areas in each level

#### Personal Project •

Developed a personal web-based smart clock using HTML, CSS and Javascript running on a Raspberry Pi

Implemented weather, music and alarm widgets using Python and Flask

#### TOHacks 2020 Hackathon •

Developed Puppr, a digital web platform to connect dog-lovers with adoption agencies to adopt dogs

Applied live web-scraping to keep the available dogs up-to-date using Python and Firebase

#### Personal Project **Q**

Integrated external gyroscopic controls into an adaptation of the original 80s Donkey Kong arcade game using Java, JGEngine and HTML

## **Skills**

**Languages**: Javascript, Python, HTML, CSS, C#, C++, Java

#### Frameworks and Libraries:

React, Node.js Flask, Bootstrap

**Tools**: MySQL, Firebase, Heroku, Unity, Git, 3D-Printing, Raspberry Pi, Figma

## **Education**

#### **University of Waterloo**

## Systems Design Engineering

**Bachelor of Applied Science** 

Sept. 2019 - Present

**GPA:** 3.9/4.0

**Relavant Courses**: Digital Computation, Data Structures and Algorithms, Digital Circuits

# Interests and Hobbies

**Technology** and DIY Computers

**3D-Printing** and 3D-Modeling

**Taekwondo** - 3rd Degree Black Belt

**Track and Field** - Athlete, Coach and Official

**Volleyball** - Athlete and Coach