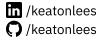
# **Keaton Lees**

klees@uwaterloo.ca keatonlees.me/portfolio



# **Experience**

### **Ballard Power Systems**

Aug. 2020 - Dec. 2020

### **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

Optimized various components of the fuel cell control systems to maximize testing performance

### Skills

Languages: Javascript, HTML, CSS, C++, Python, Java, Arduino C

Frameworks: React, Node.js

Flask, Bootstrap

Tools: MySQL, Firebase, Heroku, Unity (C#), Git, 3D-Printing, Raspberry Pi, Arduino

### **Ballard Power Systems**

Jan. 2020 - Apr. 2020

### **Systems Engineer**

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

Collaborated with senior engineers to develop, test and adapt numerous control systems

# **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

### kleez3DPrints

Summer 2019

#### **Founder**

Delivered over \$500 worth of 3D-printed designs including figurines, team logos and puzzles using SolidWorks, Autodesk Maya, and Ultimaker Cura

# **Projects**

### Octo-Do

Javascript, React, CSS, Node.js, Axios, MySQL, Firebase, Heroku

### **Personal Project**

Developed Octo-Do, a flexible to-do web application that allows the customization of overall and daily tasks Implemented user authentication using Firebase and

deployed completed application to Heroku

# 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

### **Jarvis Smart Home**

Python, Raspberry Pi

#### **Puppr**

HTML/CSS, Javascript, Python

## **Donkey Kong Arcade Adaptation**

Java, HTML

# **Personal Project**

Flask, HTML, CSS, Javascript, Developed a personal smart home using Flask running on a Raspberry Pi with a touchscreen interface

### TOHacks 2020

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

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

### **Personal Project**

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