Keaton Lees

klees@uwaterloo.ca
keatonlees.me/portfolio

in /keatonlees
 /keatonlees

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

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

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

Jarvis Smart Home
Flask, HTML, CSS, Javascript, Python, Raspberry Pi

Personal Project

Developed a personal smart home using Flask running on a Raspberry Pi with a touchscreen interface

Puppr
HTML/CSS, Javascript, Python

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

Donkey Kong Arcade Adaptation
Java, HTML

Personal Project

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

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

Education

University of Waterloo
Systems Design Engineering
Bachelor of Applied Science
Sept. 2019 - Present

GPA: 3.9/4.0
Relevant 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