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 O

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