

GUSTON LIGHTHOUSE

Phone: (909) 353-9015 | Email: glightho@asu.edu | LinkedIn: <https://www.linkedin.com/in/guston-lighthouse/>

Education

Bachelor of Science and Engineering (Robotics)

Arizona State University Polytechnic Campus, Mesa, Arizona

May 2019

Cumulative GPA: 4.00 / 4.00

Relevant Courses: Use-Inspired Design Project I & II, Electrical Fundamentals, Mechanics Fundamentals, Materials and Manufacturing Processes

Technical Skills

Languages: Java, C, C++, Python

Tools: Microsoft Office 365 Suite, Inkscape, Git, Solidworks, MATLAB, ROS

Operating systems: Windows 7 and 10, Linux Ubuntu

Course Projects

“Smart” Appliance Egg Boiler, Arizona State University, Mesa, Arizona

Fall 2017

- Collaborated with a group of 4 to design and prototype a “smart” home appliance to boil eggs for a user’s breakfast
- Coordinated all team members’ subsystem schematics and combined them into a single schematic to be produced as a PCB
- Programmed a PSoC 4 BLE to accept keypad and Bluetooth input and boil eggs for a user-determined amount of time

Automated Glockenspiel Group Project, Arizona State University, Mesa, Arizona

Spring 2016

- Brainstormed ideas in a team of 4 to design and build a microcontroller-based instrument that could be linked up with similar ones in a “symphony” and instructed to play a single song
- Designed and debugged C++ code for the Arduino microcontroller, allowing our project to quickly and accurately play a series of pre-programmed notes

Work Experience

Engineering Intern

May-July 2018

Space and Naval Warfare Systems Center Pacific, San Diego, California

- Designed and implemented a command parser to allow acoustic communication between a maritime Unmanned Surface Vehicle and an Autonomous Underwater Vehicle, with a framework to allow the parser to be integrated into a pre-existing Robot Operating System control environment.
- Assembled an Autonomous Underwater Vehicle and integrated an acoustic beacon into the AUV’s structure.

Community Assistant

August 2016- Present

ASU University Housing, Mesa, Arizona

- Supervised an area of 80+ residents and interacted regularly with residents in order to foster a sense of community and assure resident security and enforcement of University policies

Housekeeper

May-July 2016; June-July 2017

Forest Home, Forest Falls, California

- Worked with a team of two to three coworkers to sweep, vacuum, and sanitize camp cabins, replace restroom necessities such as toilet paper and paper towels, empty trash cans, and other duties to provide a positive experience to customers in a 300+ room camp

Awards & Honors

Dean’s List

Fall 2015 – Spring 2018

National Merit Scholar