Jason Less

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EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)
BS in Computer Science
Expected Graduation: June 2019
GPA: 3.6

LINKS

Website: **www.jasonless.com**
Github: **/jless97**
LinkedIn: **/jasonless**

COURSEWORK

UNDERGRADUATE
Operating Systems
Machine Organization/ Architecture
Linux/Terminal
Embedded Systems (PIC Microcontrollers)
Internet of Things Devices (IoT)
FPGAs
Digital Design

SKILLS

LANGUAGES
C++ • C • Embedded C • Shell
HTML • CSS • Python • SQL
Verilog • PHP
FRAMEWORKS + SOFTWARE
Xcode • Microsoft Visual Studio
MPLAB • Xilinx • MySQL • Bootstrap
Emacs • Vim
VERSION CONTROL
Git • SVN

HONORS/AWARDS

SOCIETIES
09/2017 - Upsilon Pi Epsilon International Comp. Sci Honor Society
01/2017 - Golden Key International Honor Society
02/2016 - Alpha Lambda Delta and Phi Eta Sigma Honor Society
04/2016 - National Society of Collegiate Scholars
AWARDS
Fall 2015 - Dean's Honor List
Winter 2016 - Dean's Honor List
Spring 2017 - Dean's Honor List

EXPERIENCE

NORTHROP GRUMMAN CORPORATION | SWE Intern
Expected June 2018 – Aug 2018 | Redondo Beach, CA
- Intern responsibilities to be determined

ELFIN 3U+ CUBESAT SATELLITE MISSION, UCLA | Lead SWE
Aug 2017 – Oct 2017 | Los Angeles, CA
- Responsible for the flight software (developed microcontroller features discussed below) and the CNDH subsystem
- Leading subsystem meetings, and collaborating effectively with other subsystems in a multidisciplinary environment
- Overseeing and providing guidance to the other CNDH members

ELFIN 3U+ CUBESAT SATELLITE MISSION, UCLA | SWE
Command and Data Handling (CNDH) Subsystem
Feb 2017 – July 2017 | Los Angeles, CA
- Established a full duplex UART connection between the Attitude Determination and Control Board with the Peripheral Controller Board
- Developed spin control law algorithms for the spin-stabilized satellite that allows ELFIN to determine its current attitude and maintain it while in orbit
- Frequent use of low level C operations when writing software to develop efficient methods to limit memory consumption and to speed up performance on the memory-limited PIC microcontrollers

ENGINEERING PROJECTS

SPACE INVADERS | Language: Verilog
June 2017
- Recreated the classic arcade game: Space Invaders using Verilog on a Nexys-3 Spartan-6 FPGA board
- Created each of the objects of the game (i.e. player, aliens, barriers, etc.) under a modularized system
- Displayed the graphics using the VGA output of the FPGA board

INTEL EDISON IOT SECURITY SYSTEM | Language: C
May 2017
- Developed a networked lock (to simulate a client unlocking a door via a server) using the Intel Edison and Grove Sensor Kit
- Designed a unique security system on the Intel Edison by utilizing various GPIOs (i.e. light sensors and push buttons), which were used to virtually unlock a door by sending an encrypted verification message (using Open SSL) to a server
- Gained insight into system design and aspects of security (within the realm of IoT systems) through the development process

FRACKMAN | Language: C++
Feb 2016 - March 2016
- Worked on a 2D game similar to the arcade game "Dig Dug" written using C++
- Implemented a wide range of classes to create each of the objects within the game
- Used in-game timing mechanisms to get objects to interact with one another and be displayed at appropriate times