# 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 other software engineers
- Led subsystem meetings, and collaborated effectively with other subsystems in a multidisciplinary environment
- Oversaw and provided guidance to the other software engineers

#### ELFIN 3U+ CUBESAT SATELLITE MISSION, UCLA | SWE

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