

# KHOI NGUYEN

knguyen99@g.ucla.edu | (858) 925 9204  
<https://www.github.com/knguyen99>  
<https://www.linkedin.com/in/khoi-v-nguyen>

## EDUCATION

### University of California, Los Angeles — Computer Science

Expected Graduation: **June 2021**

Current GPA: 3.203

## WORK EXPERIENCE

### Leidos, San Diego, CA. — Software Engineering Intern

June 2019 – September 2019

- Created an embedded system that collects data from magnetic, acoustic, and GPS sensors to determine orientation and direction of system.
- Improved data collection speed by creating interrupt driven routines for multiple I2C and I2S protocol sensors and analyzed data to ensure synchronozation of each sensor.
- Incorporated logging to an SD card by implementing FatFS library to consolidate data for analysis.

### UCLA Student Media, Los Angeles, CA. — DevOps Intern

January 2019 - Present

- Improved company workflow by creating internal websites with various functionalities such as time sheets and an apply website.
- Manage Wordpress websites through Linux servers and databases for internal and external use.

## NOTABLE PROJECTS

### Temperature Sensor — Embedded System (C)

February 2019 – March 2019

- Constructed a system that senses temperature using a Beaglebone microcontroller, logs to TLS session encryption server, and supports command line options to modify collected data.
- Optimized by reducing time to open a TLS connection through SSL encryption and reducing time to parse through command line options.

### Parallax 3D — Python Scripting / Photography (Python)

October 2018 – December 2018

- Optomized the creation of stereoscopic images through Python script, implementing libraries Imageio and Visvis. Created file management system to organize images taken from four cameras to be used for GIFs.
- Served as Lead Programmer, delegating tasks for the rest of the team based on skill sets of the members.

### Scalar — iOS Application (Swift)

June 2018 – August 2018

- Designed an iOS application that utilizes Apple's 3D Touch as a scale and converts detected force to grams, measuring up to 385 grams.
- Implemented Navigation Views and segues to manage a hierarchy of views within the application.

## LANGUAGES

**Proficient:** C++/ C, Java,  
HTML / CSS

**Familiar:** Swift, Python,  
Verilog, Javascript

## SKILLS

OOP	Linux
Git	Bash
Arduino MC	Adobe Suite

## COURSES

### Current:

Algorithms and Complexity

Computer Vision

### Completed:

Operating Systems Principles

Human-Computer Interaction

Introduction to Computer  
Organization

Computer Software  
Consturction Laboratory

Engineering Design: Internet of  
Things

Logic Design of Digital Systems

## ORGANIZATIONS

Association of Computing  
Machinery

Creative Labs

UCLA Student Media

Theta Tau Engineering Fraternity

## AWARDS

### Eagle Scout Award

Demonstrated knowledge  
various subjects, including  
wilderness survival to earn over  
21 merit badges.