# 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: 3.22

## 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 synchronization 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 using MongoDB, Express.js, Angular JS and Node.js to handle frontend and backend development.
- Manage Wordpress websites through Linux servers and databases for internal and external use.

## NOTABLE PROJECTS

**Scene Recognition** — *Computer Vision (Python / OpenCV)*
- Constructed a scene recognition program that builds a set of visual recognition systems and classifies scenes in different categories through OpenCV, Scikit-learn, and Numpy libraries.
- Increased accuracy of classification to above 50% by implementing Bag-Of-Words recognition system with SIFT, SURF, and ORB feature detections and SVM classification system

**Parallax 3D** — *Python Scripting / Photography (Python)*
- Optimized 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)*
- 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, Python

**Familiar**: Swift, Verilog, JavaScript

## SKILLS

| | |
|---|---|
| OOP | Linux |
| Git | Bash |
| Arduino MC | Adobe Suite |

## COURSES

**Current**:

Computer Network Fundamentals

Computer Graphics

**Completed:**

Algorithms and Complexity

Computer Vision

Operating Systems Principles

Human-Computer Interaction

Introduction to Computer Organization

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.