

# Timothy Koo

Aspiring Software Engineer | Riverside, 92507

☎ (714)801-5898 | ✉ timbo.koo@gmail.com | 🌐 www.timothykoo.net | 📱 timothykool | 📺 timothykool

## Education

### University of California Riverside

*Expected Grad: Spring 2021*

#### B.S. IN COMPUTER SCIENCE

*GPA: 3.89*

- **Key courses:** Advanced Data Structures and Algorithms, Machine Organization and Assembly Language Programming, Software Design and Construction, Design of Operating Systems, Intro to Machine Learning and Data Mining
- **Awards:** Chancellor's Honor List, Dean's Honor List

## Skills

**Programming Languages** C++, C, Javascript/JQuery, labVIEW; Learning: Python

**Technologies/Technical Skills** Git, Autodesk Inventor; Learning: React, Node.js, Express, NGINX, MongoDB, Django

## Work Experience

### NASA Jet Propulsion Laboratory

*La Cañada Flintridge, California*

#### SOFTWARE ENGINEER INTERN

*Sept. 2019 - PRESENT*

- Developing web interface for bioburden data storage and access in **React**
- Designing sketches for UI components and layout, maximizing user productivity

#### SYSTEMS ENGINEER INTERN

*Jun. 2019 - Sept. 2019*

- Served as an interface between an interdisciplinary team consisting of microbiologists and software developers in collaboration with Goddard Space Flight Center
- Drafted a software requirements document highlighting the functionality design and software testing scheme of a newly developed web-based "barcode accounting tool" to allow for efficient and consistent data storage and processing capabilities for planetary protection engineers

### UCR Academic Resource Center

*Riverside, California*

#### SUPPLEMENTAL INSTRUCTOR OF COMPUTER SCIENCE

*Sept. 2019 - PRESENT*

- Instruct over 100 students through lectures and programming demos
- Courses: CS10(Intro to Computer Science 1), CS12(Intro to Computer Science 2), CS14(Intro to Data Structs and Algorithms)

### Orbach Science Library Creat'R Lab

*Riverside, California*

#### STUDENT TECHNICIAN

*Apr. 2018 - PRESENT*

- Model and edit 3D CAD files on **MakerBot Print** and **Simplify3D** software
- Converted 3D print queue paper recording to online excel sheet making data input 2x faster

### Bourns College of Engineering Computer Science Department

*Riverside, California*

#### UNDERGRADUATE RESEARCHER

*July. 2018 - Dec. 2018*

- Investigated Vuforia's object detection application and its viability on the HoloLens with Unity
- Reported spacial mapping features and the ability to display depth/distance information for applications

## Projects

### ASUCR General Elections Portal

#### WEB APPLICATION

- Constructed a **bootstrapped**-based web application for all of the 2018 ASUCR elections information
- Implemented **JavaScript/JQuery** for the frontend animations and dynamic content injections
- Supported a candidate pool of 60+ individuals, 20K+ student body and saved \$8K in unnecessary spending

### RGear

#### WEB APPLICATION

- Built a web application for the 2019 RGear initiative that records student ID's through card swiping and manual input
- Employed **React** for front end interactive UI which was used by 4000 students and saved student body \$2k
- Expedited distribution process by 80%

### MyShell

#### BASH SHELL

- Emulator of the Bourne Again SHell developed in **C++**
- Implemented input and output redirection, chaining of command, and precedence set by parentheses

## Extracurricular Activity

2018-19 **Outreach Chair**, Association for Computing Machinery

2018-19 **Marketing Fellow**, Rose Hacks

2017 **1st Place Beginner's Bracket**, ACM@UCR Programming Competition