# Julia Luo





#### **SKILLS**

- Python
- ▶ SQL Android
- Java Javascript
- ▶ Firebase
- ► HTML/CSS
- React JS

#### **EDUCATION**

#### **University of California, Berkeley**

Electrical Engineering and Computer Science, B.S. 3.97/4.00 cumulative GPA | 4.00/4.00 technical GPA

Berkeley, California Aug. 2016 - Dec. 2019

### **EXPERIENCE**

#### **Robotic AI & Learning Lab**

**Undergraduate Researcher** 

- Perform sparse patch training on PyTorch FCC model to achieve affordance segmentation for grasping objects
- Generate training data and validate models using MuJoCo physics simulator and 3D objects from Blender

Berkelev, California Jan. 2018 - Present

#### Google

Engineering Practicum Intern | YouTube Rights Management Team

- ▶ Created web app to showcase the sound recording and composition mapping abilities of the Content ID API
  - Developed using Javascript, HTML, and CSS integrated with the Polymer 2.0 framework
- ▶ Currently used by the legal team at Sony Music to quickly view their sound recording assets and ownership
- ▶ Revised the back-end of auto-rejection algorithms to improve the fairness of the Content ID application flow
  - Developed back-end with Python and front-end with Spitfire templating language and HTML

#### Mountain View, California May 2017 - Aug. 2017

#### **UC Berkeley EECS Department**

CS 61A Teaching Assistant

- ▶ Host weekly discussions, lab sessions, and office hours, and grade homework and exams for the course CS 61A
- ▶ Help students with concepts like recursion, mutation, and OOP both in-person and online on Piazza

#### Berkeley, California Aug. 2017 - Present

#### Codebase

Contract developer

- Cooperate with team of 8 to build the Dash front-end and Python back-end of a web app for the start-up Riffyn
- Application performs multivariate regression on Riffyn users' data with lasso regression and categorical support

Berkeley, California Jan. 2017 - Present

#### **PROJECTS**

Preserve

**Petreon** 

#### **League of Legends Champion Selector**

Developed for Hack the North 2017

- Trained TensorFlow model on 25,000 previous matches based on the 5 champion selections of each player
- Predicts the outcome of a match to 72% accuracy when a player inputs their and the opponent's champions
- Front-end of web application developed using React JS, back-end using Node JS to call Python TensorFlow script

#### Waterloo, Ontario Sep. 2017

Developed for Mobile Developers of Berkeley

Expiry date tracking Android app which features receipt-scanning technology and smart expiry date prediction

Berkeley, California Apr. 2017

# Developed using Android Studio with Firebase back-end integration and Google Mobile Vision API

Developed for TreeHacks 2017

Facebook Messenger bot and website presenting a patron system for adopting and pledging to homeless animals

Front-end developed using HTML, CSS, Javascript, and JQuery, and back-end using AWS lambdas

Palo Alto, California Feb. 2017

## Ethos

Winner of Social Impact award at CalHacks 2016

- ▶ Chrome extension that uses IBM Watson API to report the objectivity of articles and generate author profiles
- Front-end developed using HTML, CSS, Javascript, and JQuery, and back-end using Flask and PostgreSQL

#### Berkeley, California Nov. 2016

# **AWARDS & DISTINCTIONS**

Mary Wyatt Louise Award: Ranked top three in class based on overall academic average for all years of high school **ECOO Computing Contest:** Provincial rank of 26/500 teams

Oct. 2016

April 2016

Fermat Mathematics Contest National Honour Roll: Approximate national rank of 119/20000 participants

Feb 2015