# Jonathan Chu





# **Skills**

- Languages: C++, C, Python, HTML & CSS, Verilog (comfortable) // JavaScript, Lua, Octave (familiar)
- Tools + Frameworks: Linux, Vim, Git, Bootstrap, Illustrator (comfortable) // Flask, Neo4j, Arduino, LaTeX (familiar)

## Education

### University of California, Los Angeles

**Expected June 2020** 

**B.S. Computer Science & Engineering** 

• 3.72 GPA; Data Structures & Algorithms, Software Const. Lab, Operating Systems, Programming Languages

#### Granite Bay High School

August 2012 - May 2016

• Academics: <u>Valedictorian Speech</u>, International Baccalaureate Diploma, Weighted/Non Weighted GPA: 4.63/4.00

#### Coursera

December 2017 – February 2018

Machine Learning - covered Linear & Logistic Regression, Neural Networks, Gradient Descent, and other tools

## **Experience**

#### Software Developer - BuildUCLA

July 2017 - Present

Current Project: Image Collection Navigation - website for visualization of images related to UCLA collected over the years

Building site infrastructure with Flask and inserting/pulling data with Neo4j (graph database) & Cypher queries

Past Project: Community Cataloging | GitHub- app for UCLA library to catalog books given images of cover pages with Scribe API (primary interface, Ruby on Rails), Tesseract OCR, a Django Image Uploader, and a Mongo Database

• Used python scripting to crop images to specified dimensions & send data from ScribeAPI to OCR in order to automate the process of taking relevant data (title, author, etc.) from images

#### Web Developer - Poasis

April 2017 - June 2017

Project: Website for parking sharing company that connects drivers with owners of parking spaces

• Implemented client-side logic using PHP & SQL in new webpage to connect Apartment owners to drivers

#### Graphic Design Chair & AV/Technology Chair - Circle K International

March 2017 - Present

- Built event website from ground up using HTML/CSS & Bootstrap; handled all technical aspects for large event
- Designed graphics to advertise events and establish club branding using Adobe Illustrator & Photoshop
- Worked closely with a diverse range of committees and delegated tasks to my own committee members

# **Projects**

Live Stock - node.is, HTML, CSS, Flask | GitHub

- Stock-watching app developed at LA Hacks 2018 to notify users when Twitter sentiment towards their stocks changes dramatically. Also employs technical analysis to make buy/sell/hold suggestions
- Twitter API, Google Cloud ML API, Twilio API, and BlackRockAPI won best use of BlackRock API Award

#### TetrisAI – C++ | GitHub

- Added self-moving AI capability to open source Tetris game at 12-hour UCLA Hackathon
- Wrote algorithm to compute ideal move in C++ and made several minor changes to existing code to implement it

#### Spellbreakers (Dota 2 mod) – Lua | GitHub

- Implemented new game mode where players face off in a spelling challenge + more features/modifications
- Used Dota 2 mod API written in Lua at SB Hacks 2018

## Website for Fall Training Conference 2017 – HTML, CSS | ftc.cnhcirclek.org | GitHub

- Built website for an event with 700 attendees from CA, NV, and HI following event theme and graphic standards
- Actively maintained and updated site with new information as necessary leading up to the event & after

#### Mesh – HTML, CSS, JavaScript | jonathanchu78.github.io/Mesh | GitHub

• Developed an event schedule web app at LA Hacks 2017 meant to replace paper pamphlets at large-scale events

Community Service: 300+ hours cumulative

Hobbies/Interests: Machine Learning, Piano/Classical Music, Graphic Design