






Jonathan Chu

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Skills

- **Languages:** C++, Java, Python, C, HTML & CSS, JavaScript
- **Tools & Frameworks:** Linux, AWS Lambda, S3, API Gateway, Git, Bootstrap, jQuery, AngularJS, node.js, REST

Education

University of California, Los Angeles

Expected June 2020

B.S. Computer Science | B.S. Mathematics

- 3.72 GPA; Data Structures, Algorithms, Operating Systems, Machine Learning, Computer Vision, Computer Networks, Parallel & Distributed Computing, Human-Computer Interaction, Linear Algebra, Real Analysis

Experience

Software Development Engineering Intern – Amazon Devices – Sunnyvale, CA

June 2019 - September 2019

- Developed a tool to identify Zigbee (smart home protocol) sequences in analysis of Sniffer Logs using Python 3
- Worked across teams to design & develop a web interface running on jQuery & Java Spring that allows engineers to easily access tool
- Created and configured AWS S3 Bucket to store log files & Python AWS Lambda to host tool

Software Development Engineering Intern – Amazon Go – Seattle, WA

June 2018 - September 2018

- Built a scalable UI for internal device monitoring with AngularJS
- Created an AWS API Gateway service that invokes AWS Lambdas for analysis results, to be called by a number of clients and scaled to more Lambdas in the future
- Integrated the two components for an end-to-end, production-quality service

Software Developer – BuildUCLA – Los Angeles, CA

July 2017 – June 2018

Project 2: [Image Collection Navigation](#) - website for visualization of images related to UCLA collected over the years

- Built backend with Flask/Neo4j and migrated to node.js/MongoDB to better accommodate frontend devs

Project 1: [Community Cataloging](#) | [GitHub](#) - web app for UCLA library to catalog books given images of cover pages

- 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

Technology Chair - [California-Nevada-Hawaii District](#) of Circle K International | [Our GitHub](#)

April 2018 - Present

- Established a committee, first of its kind within our organization, to build and maintain websites & tools
- Oversaw & assisted with all technical projects involving software development and web design at the District level

Projects

Live Stock – node.js, 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**

Flatpages – HTML, CSS, JS, Bootstrap | Designed a number of websites for Circle K International:

- [CNH Circle K Resource Center](#) | [GitHub](#)
- [Fall Training Conference 2017 Website](#) | [GitHub](#)