# **ANDREW ZEFF**

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#### **EDUCATION**

University of California, Los Angeles, GPA: 3.8 B.S. in Computer Science, Minor in Mathematics

**B.S. in Computer Science,** Minor in Mathematics Expected: **June 2021 Coursework**: Data Structures & Algorithms, Operating Systems, Computer Architecture, Machine Learning, Software Engineering, Probability Theory, Networks, Discrete Structures, Linear Algebra, Real Analysis, Finance & Marketing

Organizations: Tau Beta Pi, Upsilon Pi Epsilon, DevX, ACM, MentorSEAS, Tennis Club, Film Club

#### SKILLS

Languages: C, C++, Python, JavaScript, Java, Go, HTML, CSS, PHP, Lisp, Bash, Ruby on Rails, OCaml

Frameworks: Linux, AWS, Git, Node, React, Django, MongoDB, TensorFlow, MySQL, PostgreSQL, Redis, asyncio

#### WORK EXPERIENCE

#### **Amazon** - Software Engineering Intern

June 2020 – September 2020

- Developing a full-stack serverless web application for internal clients as part of the FBA IVR Platform team.
- Automating and centralizing campaign management for hundreds of teams in the Consumer Organization. (Tools: *React, Node.js, AWS Lambda, Amazon CloudWatch, DynamoDB, Amazon SES, API Gateway*)

### Cargomatic - Software Engineering Intern

June 2019 - August 2019

- Increased touchless transactions by 80% by writing serverless applications to:
  - Allow drivers to upload scanned documents to Amazon S3, automating conversion from .pdf to .png formats.
  - Analyze/verify image validity, process metadata, and store results in DynamoDB table.
- Tested integrity of applications with code coverage analyses and unit testing in MochaJS, Chai.js, and Sinon.JS. (Tools: Bash, Python, Amazon S3, AWS Lambda, Node.js, MongoDB, AWS Rekognition, DynamoDB, Cargomatic API)

#### **DevX** - Back-end Developer (StudySmart UCLA Campus Application)

December 2018 – January 2020

• Developed campus service for students to find empty classrooms in which to study by scraping various university sites, extrapolating room vacancies with data inversion, and dynamically updating new dataset to PostgreSQL. (Tools: *Puppeteer, Node.js, Express.js, AWS Lambda, DynamoDB, PostgreSQL, React*)

## **Idiomatic, Inc.** - Software Engineering Intern

June 2018 - August 2018

- Assessed user satisfaction for 30+ clients by performing sentiment analyses with AWS Comprehend on reviews.
- · Encouraged user participation by removing personally identifiable information with Google DLP API from textual data.
- · Evaluated, selected, and trained scikit-learn machine learning models, optimizing for cost, reliability, and efficiency.

#### PROJECT EXPERIENCE

### RADD (team of four)

June 2020

• Built multi-threaded web server that hosts static sites and supports HTTP keep-alive. Built with C++ and Google Cloud.

Proxy Herd March 2020

• Built a proxy herd using TCP connections that allows a single server to retrieve location requests from a client, respond to that client, and concurrently flood its response to other servers. Built with Python, asyncio, and Google Places API.

NBAopedia September 2019

• Implemented REST API backend in Express.js, Mongoose, and Python to retrieve data from api-basketball.com, train the data in scikit-learn to predict future player and team performance, and store data and results in MongoDB.

Chatter June 2019

Created Facebook Messenger chatbot with Dialogflow, Node.js and FB API to provide responses to user messages.

Chetvris April 2018

• Built multi-class C++ version of Tetris with custom pieces, using recursion, inheritance, and Standard Template Library.

#### HONORS AND DISTINCTIONS

**Facebook Hacker Cup** (round 1 qualifier and ongoing, 2869/32699) **HackMIT Puzzle Solver** (top 25 finisher) July 2020 – August 2020 July 2020 – August 2020

AIME Qualifier (top 3% worldwide on American Math Competition)

February 2017