ANDREW ZEFF

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EDUCATION

University of California, Los Angeles, GPA: 3.8
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; Inventory, Visibility, and Reporting*   June - September 2020
- Developed full-stack, serverless web application to automate and centralize campaign management, allowing hundreds of internal clients to upload campaigns, set up event-driven email notifications, control permissions, retrieve and edit campaigns, and integrate campaigns with team sprint boards.
  (Tools: *React, Node.js, AWS Lambda, Amazon CloudWatch, DynamoDB, Amazon SES, API Gateway*)

Cargomatic - *Software Engineering Intern*   June - 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 - 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 to host static sites and support HTTP Keep-Alive, using C++ and Google Cloud Platform.

Proxy Herd   March 2020
- Developed proxy herd using TCP to decrease latency by allowing a single server to retrieve client location requests, send responses, and flood location updates 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.

Chetyris   April 2018
- Built multi-class C++ version of Tetris with custom pieces, using recursion, inheritance, and Standard Template Library.

HONORS AND DISTINCTIONS

Google Foobar (round 4 and ongoing, invitation only)   August 2020
Facebook Hacker Cup (round 1 qualifier and ongoing, *2869/32699*)   July - August 2020
HackMIT Puzzle Solver (top 25 finisher)   July - August 2020
AIME Qualifier (top 3% worldwide on American Math Competition)   February 2017