David Lu

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UC Berkeley, Computer Science B.A., Class of 2022(Junior) **GPA**: 3.2/4.0

Relevant Coursework: Efficient Algorithms and Intractable Problems, Data Science, Computer Architecture, Data Structures, Fundamentals of Computer Programming, Discrete Mathematics and Probability

PROFESSIONAL EXPERIENCE

Software Engineer Intern **Uber Technologies Inc.** **May 2020 – August 2020 (Expectations met for return offer)**

- Developed an Apache Flink pipeline to produce realtime features used by members of Consumer Experience, Pricing, and Matching teams for their machine learning models. Improved latency from days/hours to minutes/seconds.
- Feature engineering to achieve a 5% absolute decrease in root mean square error for Uber Freight's Marketplace Dynamics team's baseline pricing machine learning model using the produced realtime features.
- Contributed new page in Uber's internal documentation site introducing the realtime feature onboarding process.

Software Engineer Intern **Visa Inc.** **May 2019 – August 2019 (Expectations met for return offer)**

- Developed Hadoop configuration comparison web application to cut down time during cross migrations between different Hadoop clusters from 3-5 hours to ~5 minutes for file comparisons.
- Results of tool used by team member during presentation on mission critical cross migration between Cloudera and Hortonworks cluster migrations.
- Presented a RESTful API demo using Golang and CockroachDB to data platform team as a possible alternative DB.

Research Intern **UT Austin Cockrell School of Engineering** **June 2017 – July 2017**

- Created Python script to help lab members automate and save specific calculations in .txt files. Improved lab member's efficiency by allowing them to bypass manually saving, storing, and organizing multiple files.

PROJECTS

K-Restaurants, Python

- Restaurant recommendation system based on user specifications using Yelp Academic Data. Analysis with K-means algorithm and least-squares linear regression.

RISC-V Emulator, C

- Emulator that executes RISC-V machine code and disassembles RISC-V into readable assembly code

Maps, Java

- Web browser mapping application similar to Google Maps system for finding the shortest path to different locations using A* algorithm on a tiled map.

SKILLS

Programming Languages: Java, Python, MySQL, C, Go, Javascript, HTML, CSS
Tools: Pandas, Matplotlib, Postman, Apache Flink, Flask, Git, Unix

HONORS/AWARDS/LEADERSHIP

Computer Science Mentor - Tutored three students for intro CS courses(CS61A/CS61B) during Fa 19 and Sp 20 semesters.
Berkeley Chinese Students Scholars Association(Career Development) member- Led workshops on career and industry related advice. Also helped organize several non technical social events to welcome new students. Fa 19 and Sp 20 semesters.
AIME Qualifier(2018) - *Top 5% of 44,915 AMC 12 takers. Score of 111.0/150.0.*
USA Biology Olympiad Semifinalist(2018) - *Top 10% of 5,848 USABO Open exam scores in the nation. Score of 28.5/50.*