Jeffrey Li

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Education

University of California, Berkeley — Expected Graduation: Fall 2018

- B.A., Computer Science - GPA: 3.72/4.0
- Relevant Coursework: Data Structures, Efficient Algorithms, Linear Algebra and Differential Equations, Discrete Mathematics and Probability Theory, Machine Architecture, Artificial Intelligence, Data Science, Operating Systems, Database Systems, Computer Security

Experience

Software Engineering Intern at Amazon — May 2018-Aug. 2018

Seattle, Washington

- Initialized a spillover fleet of EC2 hosts to receive redirected and repartitioned traffic from Amazon.com, significantly reducing the response latency from internal Amazon targeted advertising services to customers.
- Used Java to create a locking mechanism in DynamoDB for the fleet, allowing Amazon's targeted advertising services to maintain cache coherency and correctness in order to reduce service response time.
- Developed shell and Python scripts to determine and instantly restart lagging EC2 hosts, increasing targeted advertising services uptime and eliminating the prior need for manual detection.
- Deployed project a month early and the spillover fleet of EC2 hosts maintained ad services when traffic increased by 205% on Prime Day, signifying customers were serviced their targeted ads consistently.

Software Engineering Intern at Intel Corporation — May 2017-Aug. 2017

Folsom, California

- Created Python and shell scripts to automate remote SSH sessions for an internal automation tool to conduct battery tests on Intel systems, replacing the former need for manual testing and calculations.
- Wrote parsers in Python to generate battery life progression graphs across multiple systems with different configurations, allowing users to compare the effects of different drivers and firmware on the battery.

Teaching

Reader at UC Berkeley — Jan. 2017-May 2018

- Member of CS70 (Discrete Math) and CS170 (Efficient Algorithms) course staffs.
- Developed rubrics, graded homeworks, and hosted review sessions and office hours for an ~800 person class.

Projects

Pac-Man AI (class) — Spring 2017

- Created a bot that can play Pac-Man through the use of multiple AI techniques including state-space search, mini-max, reinforcement learning, Q-learning, hidden Markov models, Bayes nets, and probabilistic inference.

Drum Machine (personal) — Summer 2016

- Built drum machine that loops different sounds over sixteen beats by using Java. Code merges byte arrays to play sounds at the same time using byte array math.
- User can upload and delete custom audio files, and adjust tempo.

BearMaps (class) — Spring 2016

- Implemented shortest path-finder for popular locations in city of Berkeley using Java, JavaFX, and data from OpenStreetMap. Added an autocomplete location search through the use of a trie.

Skills

- Proficient in: Java, Python, Git, Linux, LaTeX, pandas, SQL
- Familiar with: JavaScript, BootStrap, Mockito, DynamoDB, AWS Kinesis, HTML, CSS