SAURAV CHHATRAPATI

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EDUCATION

University of California, Berkeley

Electrical Engineering and Computer Science, M.S.

Aug. 2020 - May 2021

• Research Discipline: Distributed Systems & Serverless Computing, Advisor: Joseph M. Hellerstein

Electrical Engineering and Computer Science, B.S.

Aug. 2017 – May 2020

- GPA: 3.73 | Dean's List Spring 2019
- Coursework: Advanced Databases, Distributed Systems, Operating Systems, Security, Networking,
 Machine Learning, Artificial Intelligence, Algorithms, Data Structures, Computer Architecture

EXPERIENCE

Software Engineering Intern | Salesforce

May 2020 - Aug. 2020

- Worked on a Tensorflow machine learning model serving system to extract insights from customer emails, using Kotlin, Java, and Apache Kafka
- Designed and built service to register and execute commands on applications, reducing time to deployment, allowing for dynamic changes in production, and simplifying monitoring/debugging

Head Graduate Student Instructor – CS 186 (Databases) | UC Berkeley EECS

January 2020 - Present

- Helped manage staff of 20 TAs to teach core database concepts, lecture in section, hold office hours, write/grade exams, and debug database management system project in 650+ student course
- Revamped relational database content and developed new material for NoSQL

Software Engineering Intern | Yahoo / Verizon Media

May 2019 – Aug. 2019

- Designed and implemented metadata migration from MySQL to RocksDB for NoSQL KVS (Sherpa)
- Programmed in C++ and Bash to deploy changes on 1000+ production servers requiring a careful operational procedure to not impact 1M+ QPS traffic
- Created a high-level design for near real-time snapshot of the KVS on Hadoop clusters

Software Engineering Intern | Informatica

Dec. 2018 - Jan. 2019

• Implemented AWS IAM integration to automate Kubernetes Node & Pod level role-based access control for customer Spark jobs to improve security, streamline manageability, and reduce resource use

RESEARCH

Graduate Student Researcher | RISE Lab – UC Berkeley EECS

May 2018 – Present

TASC

- Designed and implemented a transactional shim with strong consistency for serverless applications
- Used GoLang, Kubernetes, gRPC to provide low-latency, fault-tolerant KVS API calls

Publications

• <u>A Fault-Tolerance Shim for Serverless Computing.</u> V. Sreekanti, C. Wu, **S. Chhatrapati**, J. E. Gonzalez, J. M. Hellerstein, J. M. Faleiro. EuroSys 2020.

PROJECTS

In Demand Parking

- Developed peer-to-peer web app for finding public parking, with a team of four at CalHacks
- Implemented backend in Java using Spring Framework, and built ML microservice with Python and Flask

NBA Player Classification

- Classified NBA players and team playing styles using unsupervised ML classification techniques Gitlet
 - Designed and implemented version control system in Java with Git-like functionality

SKILLS

Languages: Java, Python, C, C++, GoLang, Kotlin, SQL, Bash

Technologies: AWS, Docker, Kubernetes, Redis, Spark, Kafka, ZeroMQ, gRPC, Git, Maven