SAURAV CHHATRAPATI

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EDUCATION

University of California, Berkeley **Expected:** May 2021
Electrical Engineering and Computer Science, B.S. and M.S.
GPA: 3.67

SKILLS

Languages: Java, Python, C, C++, GoLang, SQL, Bash
Technologies: AWS, Docker, Kubernetes, Spark, OpenMP, ZeroMQ, Git, Vim, Logisim

EXPERIENCE

Software Engineering Intern | Yahoo / Verizon Media May 2019 – Aug. 2019

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

Undergraduate Researcher | RiseLab – UC Berkeley EECS May 2018 – Present

Fluent Project

- Worked on a cloud native key-value store that uses coordination-avoiding techniques and asynchronous message passing to provide low latency reads and writes
- Implemented the Heavy Hitters Sketch to identify hotkeys to reduce per-key metadata overhead and storage by 60%

Software Engineering Intern | Informatica Dec. 2018 – Jan. 2019

- Implemented Kubernetes and AWS Identity Access Management integration to provide Node and Pod level role-based access control
- Researched cloud cluster security for deploying Spark on AWS, Azure, GCP

Computer Science Tutor | UC Berkeley EECS Jan. 2018 – Present

- Taught a weekly section of 5 students for lower division Data Structures course

PROJECTS

ParkIt Fall 2019

- Developed a peer-to-peer crowdsourced web app that matches users leaving public parking spots and users searching for parking, with a team of four at CalHacks
- Implemented backend with Java and Spring Framework, and an ML microservice with Python and Flask

Fetch Summer 2019

- Designed and implemented a location based online forum with similar functionality to Reddit, using Python and Flask

Pintos Spring 2019

- As part of Operating Systems course, developed core functionality of an operational OS, including thread scheduling, file system, user program management

Pyblas Summer 2018

- Implemented C++ library using Boost for providing Linear Algebra functions and extended library to be imported in Python to provide functionality similar to NumPy

Gitlet Fall 2018

- As part of the Data Structures course, implemented Git like version control system in Java

RELEVANT COURSEWORK

Computer Systems (Graduate Course), Operating Systems & Systems Programming, Databases, Artificial Intelligence, Data Structures
Computer Security, Machine Structures, Efficient Algorithms & Intractable Problems, Optimization Models in Engineering