

Sahil Gandhi

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EDUCATION

University of California, Los Angeles

M.S. Computer Science – (*Specialization: Distributed and Big Data Systems*)
B.S. Computer Science and Electrical Engineering – (*Summa Cum Laude*)

Apr 2019 - Mar 2020
Sep 2015 - Mar 2019

SKILLS

Programming Languages: Java, Golang, Python, Bash, JavaScript

Frameworks and Technologies: Kubernetes, Helm, Docker, Protobuf, Vert.x, React, Vault, Terraform, AWS, GCP, AZURE, SQL, PostgreSQL, OpenTelemetry, OpenCensus, DataDog, RocksDB, Git, Mercurial, UNIX

WORK EXPERIENCE

Confluent, Senior Software Engineer

June 2020 - Present

- Founding engineer on Control Plane Fleet Management team, where we handle day 1+ operations on all cloud clusters
- Designed, developed, and deployed workflow engine that increased the number of clusters we could upgrade in a day by 40000% – from 5/day to 2000+/day, reducing the time needed to roll the entire fleet from several months to 2 days
- Generalized the above workflow engine to apply to any Confluent cluster type (Kafka, KSQL, etc) and any operation type (Upgrade, Restart, Shrink, etc), allowing all cloud teams to take full advantage of immense parallelism factors and continuous monitoring capabilities
- Designed, developed, and deployed deployment engine that eliminated custom uses of Helm for Kubernetes service deployments, and scaled it up by over 30000% from 30 deployments/day to 10000+ deployments/day
- Designed, developed, and deployed service to aggregate information of all clusters into a unified view, and assisted in developing a UI that employees could interact with, eliminating the need for manual DB commands or manually stitching information from multiple sources
- Designed, developed, and deployed infrastructure CLIs to talk to the above services
- Mentored 5 new employees and conducted tens of interviews and mentoring sessions

Microsoft, Software Engineering Intern

Jun 2019 - Sep 2019

- Revamped logging infrastructure in distributed build tool to use ProtoBuf schemas for forward/backward compatibility
- Implemented a caching feature for important log data in RocksDB to speed up log file analyzers between 5x and 200x, allowing software engineers in Windows and Office to gain insights to optimize their distributed builds further

UCLA ScAi Lab, Undergraduate/Graduate Researcher

Jan 2018 - Jun 2019

- Researched under Dr. Zaniolo and Ariyam Das on real-time streaming DBs, NLP Datalog parsers, and graph visualizations
- Built an n-ary And-Or tree parser for faster querying, an NLP tool to parse Datalog and Python profilers for HAT trees

Facebook, Software Engineering Intern

Jun 2018 - Sep 2018

- Merged functionalities of several testing tools to enable automated re-testing and move to the new CI/CT pipeline
- Optimized the DB design to speed up queries and the validation portal UI by more than 50%, and automated the creation and updates of test results: saving the organization over \$300,000 a year in man-hours

Viasat, Software Engineering Intern

Jun 2017 - Sep 2017

- Created infrastructure using Docker and Apache Flume to grab data from airplane routers, and automated it using Ansible
- Processed data using Scala, stored it in OpenTSDB, and graphed it in Grafana to present to business executives

PROJECTS AND OPEN SOURCE

Trivia Bot: Created an automated python bot to tackle online trivia games like HQ Trivia, Beat the Q, and more

Micromouse: Designed the PCB and programmed the MCU for an award winning autonomous maze solving robot

Free Throw Classifier: Created a classifier for basketball free throws using three Hexiwears mounted on a user's arm

C.A.R.M.: Published a Chrome extension that lets users to message anyone else on the same website at any time

AWARDS

California Micromouse Comp (Camm): 2nd place in 2018 and 1st place in 2019

May 2018, May 2019

All American Micromouse Comp (AAMC): 2nd place in 2018 and 2019

May 2018, May 2019

UC San Diego Hacks 2017: 1st place in the Genome Link Category

Oct 2017

UC San Diego Hacks 2016: 1st place in the ViaSat Category

Oct 2016

ACTIVITIES

UCLA IEEE: PM ('18-'19), Workshops Manager ('17-'18), OPS Lead ('16-'17), Member ('15-'20)

2015-2020

UCLA Eta Kappa Nu (HKN): Membership Chair ('17-'18), Member ('17-'20)

2017-2020

UCLA Tau Beta Pi (TBP): Club Liaison ('17-'19), Member ('17-'20)

2017-2020

UCLA Upsilon Pi Epsilon (UPE): Member ('16-'20)

2016-2020

UCLA Supermileage Vehicle - Electric Vehicle: E.V. Team Lead ('16-'17), Member ('15-'17)

2015-2017