Shravan Gaonkar

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Staff Software Engineer

Software Development and Deployment • Distributed Systems Build • Data Platforms and Pipelines

Expertise in engineering and deploying software solutions, building distributed systems, data platforms, and pipelines

Innovative Staff Software Engineer with experience developing/deploying scalable, maintainable, and reliable software solutions, apps, features, and microservices with robust system infrastructure and architecture. Well-versed in building and maintaining distributed systems with experience designing, architecting, developing, and optimizing key components of a distributed clustered storage system. Expert in building and running data platforms and pipelines, developing highly-efficient deduplication based on pareto distribution, and delivering distributed telemetry solutions. Proven success in providing technical leadership/direction to teams of engineers in delivering quality software solutions and microservices.

Core Competencies:

Software Development 🕐 Solutions Engineering 🕐 Technical Requirements 🕐 System Architecture 🕐 Innovations and New Features 🕐 Components Build and Optimization 🕐 Data Platform/Pipeline Build 🕐 Customer/Technical Support 🕐 Disaster Recovery and Continuity 🕐 Distributed Systems 🕐 Deduplication 🕐 Object-oriented Design 🕐 Team Mgmt.

Technical Proficiencies:

C, C++, Python, Java, Golang, Zookeeper, Amazon S3, EBS, Kafka, Jenkins, Docker, Spark, Iceberg Format, Airflow, ChangeData Capture, Storage Protocols

Professional Experience

AIRBNB, Seattle, WA 2023 – Present

Staff Software Engineer

Building QOS for Managed Key-Value blob store serving data for all of Airbnb.

- Constructed a unique TopK Statistic-based caching solution that will reduce overall storage costs by 20% and backend QPS by 30%.

STRIPE INC., Seattle, WA 2022

Staff Software Engineer

Built, architected, and developed ChangeData capture data platform and pipelines from online DB to data warehouse (Parquet S3 objects). Created and led innovations and new features.

- Contributed to minimizing 40% of the ongoing fraud in 3 months by building and delivering data pipelines that allowed the Risk Fraud team to examine data within 2 hours of the online transaction.
- Improved fraud detection, reconciliation, and analytics by enabling and optimizing data-layout while providing a roadmap for a streaming architecture that allows fraud detection within minutes.

CISCO (Through Springpath Acquisition), San Jose, CA 2017 – 2021

Principal Engineer

Designed, architected, and developed key components of a distributed clustered storage system while developing inline highly-efficient deduplication based on zipf distribution. Created scalable distributed garbage collection using bloom filter. Established end-to-end native replication between clusters for disaster recovery. Built ETL Microservices to trigger failure alerts from telemetry data. Provided technical leadership to teams of engineers in delivering software solutions.

- Boosted the TAM of Cisco Hyperflex 30% by proposing a software solution, developing a prototype, and persuading leadership to invest in a software-defined DARE solution with competitive pricing for new customers.
- Reduced Cisco HX product support 20% with less customer escalation costs by building a pipeline and model to forecast disk failures and integrating with Cisco support to automate resolution of client tickets.
- Enabled successful product launch in 24 months by designing distributed and automated tests using Jenkins while driving smooth integration with zookeeper, intent log, distributed key-value store.
- Guided a team of 15 engineers in building core software encryption system and architected and prototyped a solution to protect customer data using AES256 family of encryption.

SPRINGPATH INC., Sunnyvale, CA 2012 – 2017

Principal Engineer

Architected and built Hyperflex software solutions and provided technical leadership to teams in delivering solutions and growing revenue from zero to $500M per year. Built ETL Microservices to trigger failure alerts from Hyperflex customer's telemetry data. Prototyped Hyperflex cluster to run on AWS (S3 and EBS) in docker containers.

- Facilitated the selling of Hyperflex to major enterprise customers in numerous markets by spearheading a project to create a business continuity solution and designing and planning the cross datacenter replication.

ATLANTIS COMPUTING INC., Mountain View, CA 2010 – 2012

Software Architect

Oversaw a development team of 15+ engineers, including platform, control plane, UI, and UX engineers in the design, engineering, and development of software solutions and features with robust system architecture and infrastructure.

- Improved performance 500%, raised reliability to 5 9s, and boosted scalability with 1000s of desktop virtual machines to the core deduplication based EXT3 filesystem of Atlantis ILIO.
- Contributed to delivering new product lines by designing and productizing new features (ILIO fastclone) while developing integrity tools to verify ILIO filesystem consistency.

ATG, NETAPP INC., Sunnyvale, CA 2009 – 2010

Research Software Engineer

Built inline lossless packet-capture and replay system for storage protocol analysis and testing. Worked on Virtual Machine Fault Tolerance and IO alignment to improve reliability and performance.

Additional Experience

Research Associate Hewlett Packard Labs, Palo Alto, CA

Graduate Research Assistant University of Illinois, Urbana-Champaign, IL

Education

Doctor of Philosophy (PhD) in Computer Science
University of Illinois, Urbana-Champaign, IL