

## WORK EXPERIENCE

### Founding Engineer - Anoki Inc

Mountain View, CA, USA | June 2023 – Current

- Lead contributor to ContextIQ product, enabling contextually powered precise ad-placements for CTV.
- Designed event-driven content ingestion pipeline for 500+ CTV channels with auto scale-out capabilities.
- Developed Go based CTV live stream recording deployed as on-demand Kubernetes jobs.
- Built full-stack application showcasing multi-modal contextual search across video data using Svelte, Python, Go, GraphQL, MySQL, and vector database.
- Developed recommendation service for CTV channels, enhanced user experience with hyper-personalization.
- Authored golib-consul, a Go based Consul library for config management and service discovery. Extending capabilities with inheritance for flat key-value store.
- Designed GraphQL APIs for content management & scheduling to on-board new content providers.
- Laid cloud-native foundational infrastructure serving CTV Ads traffic upto 300k QPS with 99.99% HA using L4/L7 Load Balancers, Caching, and Kubernetes.
- Carried out various cost optimizations for AWS resources, achieving 30% reduction in monthly costs.
- Deployed Presto, and Superset for data analytics and reporting for viewership.
- Developed cross-functional expertise through hands-on collaboration across core engineering, infrastructure, data science, and product teams.

### Software Engineer Intern - PayPal

New York City, NY, USA | May 2022 – August 2022

- Added static type safety for GraphQL resolvers based on a schema-first design philosophy.
- Used TypeScript and Codegen to generate type-safe GraphQL resolvers, increasing code maintainability.

### Senior Software Engineer - LG Ads

Bangalore, KA, India | June 2017 — June 2021

- Added 5x latency optimization for large-scale fingerprint distribution in Automatic Content Recognition system for CTV.
- Lead core platform development, enhanced monitoring and logging.
- Managed infrastructure projects: load balancers, petabyte scale storage, and compute cluster spanning several hundred nodes.
- Among the first 10 employees, played cross-team roles between ACR, Platform, and Data Science.

### Google Summer of Code - Python Software Foundation

Bangalore, KA, India | April 2016 – August 2016

- Built AngularJS and Python based interactive static code analysis application with 97% code coverage for frontend and, 100% for backend.
- Presented a workshop on "Guide to open-source contributions using Git and CI/CD" at EuroPython conference in Bilbao, Spain.

## SKILLS

**Programming Languages** – Go, Python, NodeJS, TypeScript. **Cloud and Platforms** – AWS, Kubernetes, HaProxy, Consul, Ansible, Prometheus, Grafana, Linux IP tables, Spark, Airflow, Presto, Kafka, HDFS, Ceph, Apache Superset. **Protocols and Databases** – TCP/IP, REST, gRPC, GraphQL, MySQL, MongoDB, Cassandra, Redis, Elasticsearch. **Web Technologies** – HTML, CSS, Svelte/SvelteKit, AngularJS. **Other Skills** – Code Review, Debugging.

## PATENT

- **System For Contextual Searching Using Text Search Terms**

Feb 2024

## EDUCATION

M.S, Computer Science, University of Colorado, Boulder

Aug 2021 – May 2023

B.Tech, Production Engineering, National Institute of Technology, Trichy

July 2013 – May 2017

## RELEVANT COURSES

Advanced Data Structures and Algorithms, Network Systems, Operating Systems, Distributed Systems, NLP, Deep Learning, Database, Blockchain.

## RECENT PROJECTS

- **Image Defogging using DDPM**: Utilized a U-Net-based generative model combined with a linear noise scheduler to perform image defogging on the Foggy Cityscapes dataset. **May 2023**
- **Distributed Config Deployment**: Designed and implemented fault-tolerant system based on spanning tree topology using gRPC as communication layer. Applications being multi-region config deployments, P2P data streaming etc. Built as a grad school project. [ [Github](#) ], [ [YouTube](#) ] **Dec 2022**
- **SemEval-2022 Task-4**: Detecting patronizing and condescending language with fine-tuning RoBERTa LLM. [ [Github](#) ] **Dec 2021**