

SUMMARY

Proclivity towards problem-solving with 6 years of hands-on experience with full-stack product and infrastructure development. At Anoki, I have led the development of contextual video search driving business for TV Ads sales. Work involved building full-stack, scalable video streams processing, and designing reliable ML pipeline for processing large-scale datasets. Further, worked on building TV channels recommendation system, core platform libraries and infrastructure setup. I've hands-on experience with Go, Python, NodeJS, TypeScript, Svelte, Kubernetes, Airflow, Metaflow, GraphQL, gRPC, Databases, Load Balancers and various AWS and GCP services.

WORK EXPERIENCE

Senior Software Engineer - Anoki Inc

Mountain View, CA, USA | June 2023 – Current

- Built **full-stack** contextual video search, driving business revenues for TV Ads sales.
- Implemented processing several hundreds concurrent live TV channel streams with **auto scale-out** capabilities.
- Designed a reliable **ML pipeline** empowering contextual search, processing of large-scale datasets distributed across GPU cluster.
- Developed **recommendation system** for consumer facing product, enhanced user experience with hyper-personalization of TV channels.
- Developed **core platform libraries** for Config Management and Service Discovery mechanisms based on Consul and Kubernetes.
- Implemented GraphQL backends for Content Management & Scheduling.
- Introductory discussions with team on Observability and best development practices.

Skills: Go, Python, TypeScript, Svelte/SvelteKit, Kubernetes, Metaflow, Airflow, Protobuf, gRPC, MySQL, MongoDB, Consul, Presto, Superset, HaProxy, GraphQL, AWS Mediaconvert, AWS S3, AWS Cloudfront, AWS RDS, AWS EKS, AWS ECR, Prometheus, OpsGenie, Grafana.

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, increasing code maintainability.

Skills: TypeScript, GraphQL.

Senior Software Engineer - LG Ads

Bangalore, KA, India | June 2017 – June 2021

- 5x latency optimization for a large-scale fingerprint distribution network for Audio Content Recognition system.
- Lead projects in the realm of core platform development with monitoring, logging and distributed storage infrastructure.
- Setup and managed key infrastructure projects: load balancers, and large-scale Spark cluster.

Skills: NodeJS, Python, Airflow, Bash, Docker, MySQL, HDFS, Ceph, Spark, Mesos, Kafka, Ansible, Jenkins, Prometheus, EtcD, HAProxy, Linux firewall.

Google Summer of Code - Python Software Foundation

Bangalore, KA, India | April 2016 – August 2016

- Built interactive static code analysis tool 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: Python, AngularJS, HTML, CSS, Git, TravisCI, Docker, Karma, Mocha, ChaiJS, Test Driven Development.

PATENT

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

Feb 2024

EDUCATION

M.S, University of Colorado, Boulder

Aug 2021 – May 2023

B.Tech, National Institute of Technology, Trichy

July 2013 – May 2017

RELEVANT COURSES

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

PROJECTS

- **Image Defogging using DDPM** : A generative model leveraging U-Net and a linear noise scheduler to enhance the Foggy CityScapes dataset. May 2023
- **Distributed Config Deployment**: Implementation of fault-tolerant distributed system based on a spanning tree topology. Dec 2022
[[Github](#)], [[YouTube](#)]
- **Named Entity Recognition** : Fine-tuned LLMs on a medical dataset achieving F1 score of 0.91, ranked 1st in class. Dec 2021
- **SemEval-2022 Task-4**: Detecting patronizing and condescending language with fine-tuning LLMs. [[Github](#)] Dec 2021
- **GitMate**: Contributed bug fixes and new features for ranking bugs in GitMate - an automated code review and issue triaging platform for GitHub projects. 2016