

Akash Ungarala

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Senior Backend Engineer with 10+ years building distributed systems across gaming, fintech, media, and ad-tech. Expertise in Python, TypeScript, delivering high-throughput, real-time backend platforms & AI-driven services with a focus on reliability and performance.

Skills

Languages & Backend: Python (FastAPI, Flask, Django), TypeScript/Node.js (Express), REST, OpenAPI, WebSockets, SQL

Distributed Systems & Architecture: Scalable API design, microservices, event-driven systems, async processing, protocol buffers

Cloud & Infra: AWS (Lambda, API Gateway, RDS, DynamoDB, S3, SNS, CloudWatch), GCP (GKE, Spanner, Pub/Sub, BigQuery, Firestore)

DevOps & Platform: Docker, Kubernetes, Helm, Terraform, CI/CD (GitHub Actions, GitLab CI, Bitbucket, Spinnaker)

Data & Messaging: PostgreSQL, MySQL, DynamoDB, Redis, RabbitMQ, Pub/Sub, Celery

Reliability & Quality: SLOs/SLIs, production triage, alerts, OpenTelemetry, Prometheus, Grafana, structured logging, PyTest, Jest, TDD

AI Systems: LLM integration, AI-enabled backend workflows, real-time inference orchestration

Experience

Fox Corporation – Senior Software Developer (Kforce)

Tempe, AZ | Sep 2024 – Present

- Architected CaptionExchange, a **real-time AI/Human captioning** platform using **Python** (FastAPI) and **TypeScript** (Express) to **reduce live-stream recovery from minutes to <5s** through intelligent routing and automated failover logic
- Engineered high-concurrency gateway service managing real-time audio transport and **WebSocket**-based session control to achieve **sub-second latency** for broadcast operators serving millions of viewers
- Deployed containerized microservices on Kubernetes with Helm and **CI/CD** pipelines to ensure **99.9% operational readiness** for live events with zero downtime

Fidelity Investments – Advanced Software Developer (Kforce)

Durham, NC | Oct 2023 – Jul 2024

- Architected centralized SLO tracking platform using OpenTelemetry (OTel) and **Python** (FastAPI) on **AWS Lambda** to standardize reliability metrics across **50+ engineering teams**, reducing **MTTD by 40%**
- Built real-time **React/TypeScript** observability dashboard integrating **PostgreSQL** RDS and OpenTelemetry to unify monitoring data and automate proactive breach notifications via **SNS**
- Led **POC** for high-cardinality metrics using Amazon Managed Prometheus and Grafana to **reduce** production alert noise by **50%**
- Standardized **Terraform deployments (IaC)** and **CI/CD** using **PyTest/Jest**, improving reliability and delivery of observability tools

Niantic Inc – Software Engineer II

San Francisco, CA | Nov 2021 – Aug 2023

- Owned AdTech backend platform using **Python** (FastAPI) and **TypeScript** (Express) on **GCP** Kubernetes to power location-based ads and promotions for **WebAR** and **Pokémon GO** serving **millions globally** with **99.99% uptime**
- Implemented high-throughput **event-driven** pipelines using **Celery**, **Protocol Buffers**, and **Cloud Spanner** to process real-time ad telemetry and in-game rewards at **global scale**
- Reduced production **defects by 40%** through **TDD** practices (PyTest, Jest) and enhanced **CI/CD** enforcement for deployments

Adara Inc – Senior Backend Engineer

Palo Alto, CA | Feb 2019 – Nov 2021

- Re-architected identity resolution platform using **Python** (Flask), **TypeScript** (Express), and Cloud **Pub/Sub** to scale **from 5K to 20K+ writes/sec** while **reducing infrastructure costs by 30%**
- Built **event-driven** services **processing terabytes** daily via **BigQuery** and **PostgreSQL** to support **200+** enterprise **integrations** with zero-downtime releases
- Implemented **OAuth2/RBAC security** using **Auth0** for partner APIs and **reduced query latency by 30%** via database **optimization**

Apple Inc – Senior Software Engineer (L&T Infotech)

Sunnyvale, CA | Dec 2018 – Feb 2019

- Built **REST APIs** in **Python** for internal Learning Management System to streamline employee training across iOS, iPadOS, and macOS clients with automated **CI/CD** pipelines

Google Inc – Support Engineer (BCforward)

Mountain View, CA | Oct 2017 – Dec 2018

- Supported **Dialogflow conversational AI** integrations powering **400M+** Google Assistant devices by building backend prototypes and webhooks in **Python** and **Node.js**
- Debugged and optimized **REST APIs** and **SDK integrations** to improve production deployment reliability for enterprise customers

Infosys Ltd – Systems Engineer

India | Feb 2014 – Jul 2015

- Developed enterprise **web applications** using **Python** (Django) and **MySQL** to support user management and operational workflows for Fortune 500 clients

Education

University of North Carolina at Charlotte – Master of Science in Computer Science

Aug 2015 – Dec 2016

Jawaharlal Nehru Technological University, India – Bachelor of Technology in Electronics Engineering

Sep 2009 – May 2013