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Top Skills

Distributed Systems

Next.js

Apache Kafka

Certifications

Learn How To Code: Google's Go (golang) Programming Language

The Complete Flutter Development Bootcamp with Dart

The Complete 2020 Web Development Bootcamp

Umar Ahmed Thameem Ahmed

CS Grad @ CU Boulder | ex-SDE @ Infibeam Avenues | CEG
| Real-Time Systems | Scalable ML Infrastructure | Full Stack
Development

Boulder, Colorado, United States

Summary

Hey there!

I'm pursuing a Master of Science in Computer Science at the University of Colorado Boulder, with a focus on large-scale systems, ML, and AI infrastructure. In addition, I'm particularly interested in learning more about LLMs and recommendation systems. As I embark on this academic journey, I'm actively looking for Software Engineering internships starting Summer 2026, where I can apply my experience in distributed systems, backend engineering, and scalable cloud architecture.

Previously, I worked as a Software Development Engineer, where I focused on building scalable, low-latency systems powering AI-driven applications. I specialized in architecting backend systems and ML infrastructures for scale with a sharp focus on optimization, reliability, and real-time performance.

At Phronetic AI, I was selected by the CEO as a founding engineer to lead the design and development of the core infrastructure for the Developer Playground and AI Business Manager MVPs. This involved everything from AWS cloud architecture and LLM-serving pipelines to API design and collaborating with ML researchers on inference workflows. I gained hands-on experience with AWS, Python, LangChain, Langfuse, and MongoDB.

Before that at Infibeam Avenues, I developed high-performance microservices for an e-commerce platform serving over 11 million monthly active users, using Ruby on Rails, AngularJS, Redis, Docker, MySQL, ELK stack, and Kubernetes. Furthermore, my experience also includes multiple internships with a strong focus on full-stack application development using Flutter, Angular, Spring Boot, and PostgreSQL.

Always happy to connect and chat!

Experience

University of Colorado Boulder

5 months

Course Grader

January 2026 - Present (1 month)

Boulder, Colorado, United States

Course Grader for CSCI 3155: Principles of Programming Languages under Professor Gowtham Kaki

Course Grader

September 2025 - December 2025 (4 months)

Boulder, Colorado, United States

Course Grader for MATH 2001: Introduction to Discrete Mathematics under Professor Peter Mayr

Course Link: <https://math.colorado.edu/~mayr/teaching/math2001fall25/>

Course Grader for MATH 2130: Introduction to Linear Algebra for Non-Mathematics Majors under Dr. Zheng Xiao

CU Boulder Division of Student Life

Student Assistant

August 2025 - December 2025 (5 months)

Boulder, Colorado, United States

Responsibilities:

- Serve students while ensuring a positive and efficient experience.
- Prepare and organize assigned station prior to opening hours.
- Support team members by assisting in station setup and readiness.
- Maintain cleanliness and uphold service quality standards.

PhroneticAI

Software Development Engineer - Machine Learning

January 2024 - July 2025 (1 year 7 months)

Bengaluru, Karnataka, India

Summary:

Selected as the one of the founding engineers to architect the core infrastructure for the Developer Playground and the flagship MVP for AI Business Manager. I led the design, development, and deployment of critical AI services, data pipelines, foundational systems, and internal operational tools, directly enhancing developer productivity, operational efficiency, and real-time capabilities across both products.

Key Accomplishments:

- Engineered and led the core backend development for an AI-powered video conferencing platform (WebRTC, RTSP, SocketIO, HLS). This included developing real-time ML pipelines (Celery, AWS Lambda) and a custom, scalable metering service (Redis Pub/Sub) for usage tracking and billing (optimized with appropriate MongoDB indexes for fast aggregations).
- Deployed a browser-based validation service using OpenAI and Anthropic's Computer Use, achieving 99% stream uptime. Added fallback via UGround + PyAutoGUI.
- Built a prompt-tuned LLM-based NL2SQL service for accurate MongoDB queries with embedded business logic. Integrated Langfuse for tracing and guardrails for reliability. Significantly boosted developer productivity.
- Designed an end-to-end alerting system with Email/Telegram integrations and OpenAI-based validation, including custom CCTV downtime detection.
- Set up org-based IAM roles for the user platform and deployed the ELK stack for centralized monitoring.
- Deployed highly available, low-latency API infrastructure for serving ASD and PLLAVA models.
- Developed a recommendation engine for AI agent tasks based on thread/message history.
- Integrated HLS streaming for faster output frame delivery and reduced wait times.

Infibeam Avenues Limited

Software Development Engineer

August 2022 - January 2024 (1 year 6 months)

Bengaluru, Karnataka, India

Summary:

I significantly contributed to both the Catalog Management System and Fulfillment teams for the JioMart e-commerce platform. My work involved delivering critical platform features, engineering robust admin tools, and

implementing scalable solutions that directly enhanced operational efficiency, streamlined seller experiences, and improved overall data management.

Catalog Management System:

- Built CRUD APIs for price management with file upload/download support.
- Engineered admin tools for seamless catalog pushing to downstream systems, catalog life-cycle management tools (purge, deactivation, reactivation) and efficient catalog migration across categories, with bulk upload capabilities, streamlining operations.
- Integrated Buybox features via third-party APIs, expanding platform functionality.
- Introduced new properties across catalog, category, and variants, enhancing data granularity.
- Built a stock approval work allocation module with a round-robin strategy, optimizing approval workflows and workload distribution.
- Modeled and built RESTful APIs for complex Zone/Cluster-based catalog pricing, crucial for the B2B initiative.

Fulfillment:

- Introduced a scalable seller notification system using Firebase, with bulk import capabilities, cutting manual messaging efforts by 40 hours/month across support teams.
- Developed CRUD APIs for a seller ticketing system, integrating with a 3rd-party service, improving issue resolution time by 25%.
- Built a revenue calculator and implemented seller holiday approval flow and stock transfer request approval flow, streamlining key business processes.

Totallr

Software Development Intern

April 2021 - July 2021 (4 months)

Chennai, Tamil Nadu, India

Summary:

Built and integrated a full-stack Point-of-Sale (PoS) application using Spring Boot and Angular, implementing RESTful APIs and database mechanisms (triggers, stored procedures) to automate PoS workflows, ensure transaction accuracy, and deliver critical features like invoice export.

VDart Digital

Technocrat Intern

August 2020 - December 2020 (5 months)

Atlanta, Georgia, United States

Key Accomplishments:

- Designed and built a Flutter + PostgreSQL system to streamline onboarding and coordinate events across 500+ employees, improving internal engagement and efficiency.
- Delivered 3+ user-centric mobile interfaces for monetizable clients using Flutter and Figma, aligning design with business needs and enhancing user experience.
- Recorded key takeaways from weekly team meetings and submitted structured reports to ensure alignment, accountability, and informed decision-making.

Education

University of Colorado Boulder

Master of Science - MS, Computer Science · (August 2025 - May 2027)

College of Engineering, Guindy

Bachelor's degree, Computer Science · (August 2018 - April 2022)

Jawahar Higher Secondary School, Ashok Nagar, Chennai

· (June 2016 - April 2018)

Jawahar Vidyalaya Senior Secondary School, Ashok Nagar, Chennai

· (June 2006 - April 2016)