

Technical Skills

Languages: Python, JavaScript (ES6+), TypeScript, Java

Frontend: React.js, Next.js, React Native, Tailwind CSS

Backend: Node.js, Express.js, Spring Boot, Flask, FastAPI, GraphQL, Socket.IO

Databases: PostgreSQL, MongoDB, Redis

Cloud & DevOps: AWS (EC2, S3), Docker, Kubernetes, GitHub Actions, OpenTelemetry, Grafana, Datadog

Practices: API Design, Microservices, CI/CD, TDD, Unit Testing (PyTest, Jest), Agile

Experience

Software Engineering Intern

Jan 2025 – Jul 2025

Toyz Electronics

Remote

- Streamlined admin review workflows by 30% through React + TypeScript dashboards with role-based views and batched data fetching, accelerating student evaluations.
- Optimized release process, saving 4+ hours per cycle by refactoring 5+ workflows into a shared Next.js framework with reusable components/hooks.
- Engineered secure AWS S3 uploads (presigned URLs, live preview, validation) that lowered submission errors by 20%.
- Minimized release rollbacks by 30% by enforcing trunk-based Git branching and automated GitHub Actions checks.
- Expanded frontend coverage to 70% with Jest on critical React/Next.js paths, preventing escaped bugs prerelease.

AI Software Engineer (Research)

Jan 2024 – Dec 2024

University of Georgia

Athens, GA

- Delivered a production-ready audio recognition system that classified user inputs in <500ms, enabling real-time search-by-humming and boosting usability across mobile and web clients.
- Optimized inference speed by 35% through vectorized MFCC extraction and advanced noise filtering, improving accuracy in noisy environments and enhancing live responsiveness.
- Deployed the service as a Flask API with async I/O, integrated into a React Native app, achieving a seamless user experience across platforms.
- Orchestrated deployments with Docker and Kubernetes using blue/green rollouts, cutting release downtime by half and ensuring high availability.

Freelance Prompt Engineer

Aug 2023 – Jan 2024

Outlier AI

Remote

- Devised 100+ optimized LLM prompts using few-shot patterns and tool-use constraints, boosting workflow accuracy by 15%.
- Developed FastAPI-based evaluation benchmarks with regression checks that cut customer-facing errors by 10%.

Projects

Betting Ledger Microservice

Spring Boot, PostgreSQL, Kafka, AWS, Kubernetes

- Built a high-throughput ledger service sustaining 50K+ wagers/minute under simulated load (k6/JMeter) with p95 latency below 10ms, delivering sportsbook-grade performance at scale.
- Safeguarded financial correctness via idempotent APIs, transactional outbox pattern, and settlement integrity checks, eliminating duplicate or inconsistent entries.
- Instrumented distributed tracing with OpenTelemetry, Datadog APM, and Grafana dashboards, cutting mean debugging time by 40% and improving system reliability.

Real-Time Sports Data Pipeline

Kafka, Spark Structured Streaming, Delta Lake, GraphQL, React.js, Docker

- Architected a streaming pipeline ingesting live sports APIs into Kafka → Spark Structured Streaming → Delta Lake, sustaining sub-5s end-to-end latency for real-time score updates.
- Refined checkpointing, partitioning, and file compaction strategies, boosting throughput by 35% and cutting processing delays under high-volume feeds.
- Exposed processed event data via a GraphQL API consumed by a React.js dashboard with live visualizations, enhancing user engagement through instant updates.
- Automated containerized builds and deployments with Docker and GitHub Actions CI/CD, reducing manual release effort by 40% and ensuring consistent delivery of updates.

Education

University of Georgia

Aug 2023 – May 2025

Master of Science in Computer Science, **GPA: 3.6/4.0**

Athens, GA

Coursework: Distributed Systems, Algorithms, Software Engineering, Trustworthy ML

SRM Institute of Science & Technology

Aug 2019 – May 2023

Bachelor of Technology in Computer Science, **GPA: 8.6/10**

Chennai, India

Academic Research: Published “Gesture-Controlled Virtual Mouse” in *Springer Lecture Notes in Internet of Things*, 2023