Ashish Anand Damale

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Education

Master of Science in Software Engineering *GPA: 3.74/4.0*
Arizona State University, Tempe, AZ *May 2026*

Bachelor of Engineering in Computer Engineering *GPA: 3.78/4.0*
University of Mumbai, Mumbai, India *May 2023*

Technical Skills

Languages: TypeScript, JavaScript, Python, Java, Go, C++, C, C#, PHP, Solidity
Frontend: React, Next.js, Angular, Vue, React Native, Redux, Tailwind CSS, Three.js, HTML, CSS
Backend: Node.js, Express.js, REST APIs, GraphQL, Kafka, WebSockets, SSE
Databases: PostgreSQL, MongoDB, SQL, Neo4j
DevOps & Cloud: Docker, Kubernetes, AWS (EC2, S3, Lambda), Git, GitHub Actions, Linux
Monitoring & Testing: Prometheus, Grafana, Playwright, Cypress, Jest
Core: Object-Oriented Programming, Data Structures & Algorithms

Professional Experience

Software Engineer Intern, Ticketmaster *June 2025 – August 2025*

- Refactored legacy UI components using TypeScript and Next.js, resolving layout shifts to improve Core Web Vitals across mobile platforms.
- Migrated automated QA tests from Cypress to Playwright by working closely with QA engineers, improving coverage and reducing execution time by 35%.
- Created real-time Prometheus & Grafana dashboards used daily by the QA team, reducing the time required to identify and fix flaky tests by 50%.

Full Stack Developer Intern, University of Mumbai *June 2021 – August 2021*

- Delivered a full-stack exam platform using React.js, Node.js, and Express.js, automating 90% of administrative workflows.
- Engineered PostgreSQL-backed REST APIs to migrate 1,000+ records, utilizing Jest for data integrity testing.
- Introduced stateless authentication using JWT and middleware to ensure secure, scalable access control.

Python Developer Intern, Trivia Software *December 2020 – March 2021*

- Designed management system handling 1,000+ records with Python and SQLite3, reducing data entry time by 50% through streamlined workflows and batch processing capabilities.
- Built database layer using SQLite3 with parameterized queries and transaction management, preventing SQL injection vulnerabilities across 10+ CRUD operations.
- Collaborated in a cross-functional team of 5 devs, leveraging daily stand-ups and code reviews to optimize modules.

Project Experience

Therapy AI (Winner, DevLabs Hackathon)

- Built AI therapy training application simulating realistic patient interactions for mental health professionals, using Next.js 15, TypeScript, and Google Gemini 2.5 Flash API with Docker containerization.
- Implemented real-time streaming architecture using Server-Sent Events (SSE) and Express.js, enabling live AI conversations with session persistence and multi-persona role-playing scenarios stored in Google Cloud Storage.
- Integrated crisis detection algorithms analyzing conversation sentiment and keywords to flag high-risk situations, with speech synthesis for immersive audio-based training sessions.

PreMarket

- Developed a predictive trend analytics platform using Next.js 16, React 19, and TypeScript analyzing 10+ data sources to forecast emerging market opportunities 3-5 days in advance, enabling early investment decisions with 70%+ accuracy.
- Designed responsive dashboard with Tailwind CSS v4 and localStorage-based watchlists, enabling users to track 100+ trends simultaneously with real-time probability updates and mobile-optimized card layouts.
- Optimized rendering performance using React 19 hooks (useMemo, useCallback), reducing re-renders by 60% and maintaining <100ms filter response times across 1000+ trend cards.

Graph Data Pipeline with Neo4j, Docker & Kubernetes

- Established a Dockerized Neo4j–Kafka pipeline on Kubernetes to process 7M+ taxi trips with 99% uptime and <2s latency.
- Automated Parquet-to-Neo4j ETL via Kafka Connect, cutting manual processing by 90%.
- Identified top 20 high-traffic zones using PageRank algorithm, enabling route optimization that could reduce driver idle time by 15% based on historical trip patterns.