

**PROFESSIONAL EXPERIENCE****AI/ML Engineer**

07/2025 - Present

**MyStage Music Inc.**

- Engineered an intelligent data processing pipeline utilizing **Google Gemini Pro (Vertex AI)** to perform semantic entity resolution and deduplication on raw event data, improving dataset accuracy by 25% for downstream search algorithms.
- Architected a resilient data acquisition system using **Playwright** with automated proxy rotation and exponential backoff strategies, successfully scraping and indexing 70,000+ records daily across 650+ locations despite complex anti-bot measures.
- Developed high-performance RESTful APIs with **Fast API** and **GCP Cloud Functions**, integrating **Algolia** for sub-50ms search query latency and **Google Firestore** for real-time data syncing.
- Implemented AI observability and monitoring using **Log fire**, enabling real-time tracing of LLM inputs/outputs and reducing debugging time for failed data pipelines by 40%.

**Software Developer**

09/2023 - 05/2025

**Ed-Plus, Arizona State University**

- Architected a Graph RAG (Retrieval-Augmented Generation) chatbot by integrating **Neo4j** knowledge graphs with **Vector Databases**, reducing model hallucinations by anchoring **OpenAI** responses in structured university data.
- Engineered a high-volume ETL pipeline using **Python** and **Pandas**, automating the transformation of 10,000+ transcripts and slashing processing time by 93% (4 hours to 15 minutes).
- Optimized LLM inference latency to sub-10s for complex multi-hop queries by implementing **SQL-based caching strategies** and asynchronous retrieval with **LangChain**.
- Built responsive AI-chat interfaces using **React.js** and **Material UI**, designing a streaming UI that improved user engagement metrics by 35%.

**Software Developer Intern**

06/2024 - 08/2024

**Knowledge Exchange for Resilience, Arizona State University**

- Engineered a high-throughput ETL pipeline using **Python** and **PostgreSQL**, processing 10,000+ daily faculty profiles and implementing validation logic that improved downstream data accuracy by 95%.
- Developed and deployed 20+ production-grade REST APIs using **.NET Core 8** and **AWS EC2**.
- Slashed API latency by 60% (from 198ms to 20ms) by architecting a **Redis caching layer** and optimizing complex SQL queries, ensuring sub-second response times under load.
- Established a comprehensive QA framework, writing automated stress tests in **Python (Locust)** that simulated peak traffic conditions to identify and patch system bottlenecks before deployment.

**Software Engineer**

01/2022 - 07/2023

**Zeus Learning**

- Spearheaded the migration of a monolithic backend to a distributed MVC microservices architecture using **.NET Core**, **Docker**, and **Kubernetes**, reducing infrastructure costs by 20% and resource overhead by 35%.
- Orchestrated high-availability deployments handling 10,000+ daily requests with 99% uptime, utilizing **RabbitMQ** for asynchronous messaging and **Nginx** for load balancing.
- Engineered robust CI/CD pipelines (Jenkins, GitLab CI) with automated **SonarQube** quality gates, slashing deployment time by 70% and reducing production incidents by 40%.
- Developed an ML-driven occupancy prediction system using **Node.js** and **Redis** for 300+ enterprise locations, optimizing desk booking efficiency and boosting occupancy rates by 30% for Fortune 500 clients.

**Software Developer Intern**

09/2021 - 12/2021

**EAT.FIT**

- Optimized live order tracking using **React.js** and **Google Maps API**, implementing polling algorithms that reduced external API costs by 45%.
- Engineered a real-time notification service using **Express.js** and **WebSockets**, reducing support calls by 35%.

**TECHNICAL SKILLS****Languages:** Python, C#, JavaScript, TypeScript, Go, SQL**AI & ML Frameworks:** LangChain, LlamaIndex, PyTorch, TensorFlow, Hugging Face, OpenAI API, Scikit-learn, Pandas, NumPy**Web & Backend:** FastAPI, Django, Flask, .NET Core, Node.js, React.js, Redux, GraphQL, Playwright**Databases:** PostgreSQL, MySQL, Redis, Neo4j (Graph DB), Pinecone (Vector DB), DynamoDB**Cloud & DevOps:** AWS (EC2, Lambda, EKS, SQS, S3), Google Cloud Platform (GCP), Docker, Kubernetes, Jenkins, GitLab CI/CD, Nginx, RabbitMQ**Tools & Testing:** Git, Postman, Locust, xUnit, Logfire, Model Context Protocol (MCP)**EDUCATION****Master of Science, Computer Science**

08/2023 - 05/2025

Arizona State University (ASU)

GPA: 4.0

**Bachelor of Technology, Information and Communication Technology**

08/2018 - 05/2022

Dhirubhai Ambani Institute of Information and Communication Technology

**PROJECTS****PrismSplit | Expense Management Application**

12/2025 - Present

- Developing a mobile application with offline sync for granular bill splitting, allowing users to parse receipts and assign specific items to individuals rather than simple even splits. (React Native, Expo, Zustand, TypeScript, TanStack, Tamagui)
- Engineered the backend logic to handle many-to-many relationships between users, receipts, and line items, ensuring data consistency across shared groups. (Supabase, SQL)

**Auto-Scaling Image Recognition as a Service**

01/2024 - 04/2024

- Constructed an AWS cloud infrastructure SaaS using AWS EC2, AWS SQS, Lambda, API gateway, Terraform and amplify for auto linear scaling based on demand providing image recognition service through deep learning models, serving 100 concurrent requests in 5 seconds. (AWS SDK)

**Github PR review MCP agent**

07/2025 - 08/2025

- Engineered an automated code review bot using the **Claude Model Context Protocol (MCP)**, integrating directly with **GitHub Webhooks** to trigger semantic code analysis on every new Pull Request.
- Orchestrated cross-platform workflows by connecting the agent to **Asana** and **Github Actions**, enabling it to automatically link PRs to tickets, update statuses, and post summary comments without human intervention.