

Tejesh Boppana

tejesh0209.github.io | linkedin.com/in/tejesh0209 | Gainesville, FL, US

tejesh.boppana@outlook.com | (352) 721-1025 | [NVIDIA-Certified Associate: Generative AI LLMs](#)

WORK EXPERIENCE

Software Development Engineer | Incepta, Inc. | Remote, United States

Aug 2025 – Dec 2025

- Architected cloud-native email automation platform with FastAPI backend and PostgreSQL database, integrating Gmail MCP server for secure real-time mail ingestion, classification, and response tracking—deployed on Supabase with 99.5% uptime.
- Engineered intelligent routing system using LangChain agents to automatically classify incoming messages, delegate tasks across departments, and generate contextual autoreplies, reducing manual processing time by 60% and handling 500+ daily emails.
- Established MLOps production pipelines with continuous model evaluation, A/B testing, and versioning workflows, achieving 90%+ classification accuracy while maintaining sub-200ms API response latency under concurrent load.

Software Development Engineer Intern | Symphonize | Remote, India

May 2023 – Dec 2023

- Built and deployed decision tree prediction service for real-time soil assessments using Flask web framework, containerized with Docker, and hosted on AWS EC2/ECR infrastructure, driving 30% increase in farmer platform engagement within 90 days.
- Automated CI/CD workflows through GitHub Actions, implementing staged deployments with rollback capabilities that reduced production errors by 50% and accelerated feature release velocity by 40%.
- Optimized NoSQL database queries and indexing strategies, achieving 30% reduction in application deployment cycles while improving data retrieval speeds by 45% across microservices architecture.

PROJECT EXPERIENCE

SentinelAI – Autonomous Intelligence Platform | React, FastAPI, Docker, Kubernetes

Jun 2025

- Structured production autonomous agent platform with React frontend and FastAPI backend, processing text, voice, and vision inputs through WebSocket bidirectional streaming to support 50+ concurrent connections with sub-500ms response latency.
- Deployed Dockerized application to AWS EC2 with Nginx reverse proxy implementing HTTPS, CORS policies, and load balancing, achieving 200+ requests/minute throughput across multiple geographic regions with 99.2% uptime.
- Designed modular service abstraction layer reducing external API integration time from 2 days to 15 minutes, enabling seamless swapping of vision/voice/data providers through dependency injection and standardized interfaces.

Smart Hotel Booking System – Production Web Service | Gunicorn, Containerization, Monitoring

Sept 2024

- Executed Flask web application with responsive form-based interface and Google Cloud Storage backend, delivering real-time ML predictions on 3.1MB reservation datasets through Gunicorn WSGI server configured with 4 workers.
- Established Jenkins CI/CD pipeline with 7 automated stages (checkout, dependency installation, Docker build, testing, registry push, deployment), reducing deployment time from 45 minutes to 8 minutes while eliminating 95% manual errors.
- Integrated MLflow experiment tracking dashboard monitoring 50+ training runs with hyperparameter logging, performance metrics visualization, and model artifact versioning, enabling systematic comparison and rollback capabilities.

Intelligent Content Summarizer – Full-Stack NLP Application | React UI, FastAPI Backend

Aug 2023

- Implemented FastAPI microservice exposing REST endpoints for model training and inference, implementing async request handling with Uvicorn ASGI server to process summarization requests with sub-3s CPU latency.
- Containerized application using multi-stage Docker build reducing image size from 2.8GB to 1.1GB (61% reduction), deploying via automated pipeline that pulls from Amazon ECR and performs zero-downtime container swaps.
- Developed component-based architecture with configuration management through YAML files, separating data ingestion, tokenization, training, and evaluation into reusable Python classes achieving 85% test coverage

EDUCATION

Masters, Computer Science | University of Florida | Gainesville, FL | GPA: 3.83/4

Dec 2025

- Relevant Coursework: Advanced Data Structures, Algorithms, Software Engineering, Distributed Operating Systems, Computer Networks, Computer Information Security, Intro to Data Science, Data Engineering

Bachelors, Computer Science | Bennett University | Delhi, India | GPA: 3.5/4

May 2023

TECHNICAL SKILLS

Programming Languages: Python, C++, MySQL, JavaScript, HTML/CSS, RESTful APIs, MySQL, PostgreSQL, NoSQL, Redis

Frontend: React.js, Next.js, Redux, Tailwind CSS, Material-UI, Webpack, Responsive Design

Backend: Node.js (Express, Nest.js), Django, Flask, FastAPI, Spring Boot, RESTful APIs, GraphQL, WebSocket

Databases: PostgreSQL, MongoDB, Redis, DynamoDB, Cassandra, Elasticsearch

Cloud & Infrastructure: AWS (EC2, S3, Lambda, RDS, CloudFront, API Gateway), GCP, Azure

DevOps & CI/CD: Docker, Kubernetes, Jenkins, Terraform, GitHub Actions, ArgoCD, Helm, Prometheus, Grafana

Architecture & Messaging: Microservices, Event-Driven Architecture, Message Queues (Kafka, RabbitMQ, SQS)

Testing & Tools: Jest, Pytest, Cypress, Selenium, Postman, Git, Nginx, Jira

LEADERSHIP EXPERIENCE

Campus Brand Ambassador | Perplexity AI | Gainesville, FL

Jul 2025

- Served as Campus Ambassador for Perplexity AI; drove a 35% increase in student engagement, onboarded 200+ new Comet users.