

# Tejesh Boppana

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## 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.