

# Mahidhar Reddy

+91-9640058234 | mahidarreddy.2005@gmail.com | mahidharreddy | mahidar22  
Guntur East, Andhra Pradesh, India

## EDUCATION

### Narasaraopeta Engineering College

Guntur, Andhra Pradesh

Bachelor of Technology in Artificial Intelligence; CGPA: 7.50/10.0

July 2024 – June 2027

- Relevant Coursework: Data Structures & Algorithms, Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Web Technologies, Database Management Systems

## TECHNICAL SKILLS

**AI/ML & LLM Technologies:** TensorFlow, PyTorch, Scikit-learn, Transformers, LangChain, OpenAI API, Gemini API, LlamaIndex, Vector Databases (Pinecone, Chroma)

**Programming Languages:** Python, JavaScript, Java, SQL, HTML5, CSS3

**Web Development:** React.js, Node.js, Express.js, Next.js, RESTful APIs, GraphQL, Socket.io

**Databases:** MongoDB, MySQL, PostgreSQL, Redis, Firebase

**DevOps & Cloud:** Git, GitHub, Docker, AWS (EC2, S3, Lambda), Google Cloud Platform, CI/CD Pipelines

**Frameworks & Libraries:** Flask, Django, FastAPI, Pandas, NumPy, Matplotlib, Seaborn

**AI Tools & Prompt Engineering:** Advanced Prompt Engineering, RAG Systems, ChatGPT, Claude, Gemini, Midjourney, Stable Diffusion

## PROJECTS

### Generative AI Chatbot with RAG | Python, LangChain, OpenAI API, Pinecone, FastAPI

2024

- Built production-ready conversational AI system using Retrieval-Augmented Generation (RAG) architecture, processing 1000+ documents with 92% answer accuracy
- Implemented vector embeddings with Pinecone for semantic search, reducing query response time to under 2 seconds
- Designed FastAPI backend with async operations handling 500+ concurrent users, deployed on GCP Cloud Run
- Integrated prompt engineering techniques and few-shot learning to optimize GPT-4 responses for domain-specific queries

### Full Stack E-Commerce Platform | MERN Stack, Redux, Stripe API, JWT, AWS S3

2024

- Developed scalable e-commerce application with React frontend and Node.js/Express backend serving 300+ daily active users
- Implemented secure payment processing using Stripe API, user authentication with JWT, and role-based access control
- Optimized MongoDB queries with indexing and aggregation pipelines, achieving 60% faster data retrieval
- Deployed on AWS with S3 for media storage and EC2 for backend hosting, implementing CI/CD with GitHub Actions

### AI Image Generation & Fine-Tuning Platform | Python, Stable Diffusion, LoRA, Gradio, PyTorch

2024

- Created web application for custom AI image generation using fine-tuned Stable Diffusion models with LoRA adapters
- Trained custom models on 5000+ images using transfer learning, improving output quality by 40% for specific styles
- Built interactive UI with Gradio for real-time prompt testing and parameter adjustment, deployed on HuggingFace Spaces
- Implemented prompt optimization algorithms and negative prompting techniques for enhanced image quality control

### Sentiment Analysis Dashboard | Python, BERT, Transformers, Flask, React, D3.js

2024

- Engineered NLP pipeline using fine-tuned BERT model for multi-class sentiment classification with 89% F1-score
- Processed and analyzed 50K+ social media posts using data preprocessing techniques and feature engineering
- Developed interactive React dashboard with D3.js visualizations for real-time sentiment tracking and trend analysis

## CERTIFICATIONS & ACHIEVEMENTS

---

**Introduction to Generative AI** – Google Cloud

**Introduction to Large Language Models** – Google Cloud

**AI Tools Workshop** (2x Certified)

**Advanced Prompt Engineering & LLM Application Development**

**GitHub Portfolio** – 15+ projects showcasing full stack and AI development skills

**Technical Leadership** – Led student coding workshops on AI integration and modern web development