



GANASYAM MANI SANKAR BUGATHA

Vizianagaram , AP, India. • 9391934047 • ganasyammanisankarbugatha@gmail.com • Portfolio website

Profiles

- GSMS-B
- Ganasyam mani sankar bugatha
- GSMS-B Portfolio

Summary

Computer Science student specializing in AI/ML systems and Web development. Built multi-agent AI system with RAG architecture and deployed 4 full-stack applications. Strong foundation in LangChain, FastAPI, and modern AI development practices. Seeking AI/ML or Software Engineering internship opportunities to apply technical skills in real-world problem-solving.

Projects

- ContraSignal

December 2025 - January 2026

Multi-Agent Stock Analysis System

https://gsms-b-contrasignal.hf.space/

 - Designed 4-agent AI architecture (News Sentinel, Fundamental Analyzer, Peer Comparator, Signal Generator) to analyze stock fundamentals against negative news sentiment
 - Implemented RAG pipeline using ChromaDB and Sentence Transformers for document retrieval and semantic search across financial documents
 - Integrated NewsAPI and web scraping techniques for real-time financial data ingestion and analysis
 - Built FastAPI backend processing complete analysis in approximately 120 seconds combining news sentiment with fundamental metrics
 - Tech: Python, FastAPI, LangChain, ChromaDB, Google Gemini, Sentence Transformers, NewsAPI, PDFPlumber
- ProjectQR

January 2026 - February 2026

Dynamic QR Code Management Platform

https://projectqr.onrender.com/

 - Built QR code generation and management system with real-time analytics dashboard and geolocation tracking
 - Implemented geolocation tracking using GeoLite2 and ip-api integration for detailed scan analytics including device and browser information
 - Designed PostgreSQL database schema with async SQLAlchemy for efficient data persistence and query optimization
 - Created JWT-based authentication system with bcrypt password hashing for secure user management
 - Developed responsive analytics dashboard with Chart.js visualizations for tracking QR code performance metrics
 - Tech: FastAPI, PostgreSQL (Supabase), Vanilla JavaScript, Chart.js, Async SQLAlchemy, Bcrypt, Render

Multi-Agent Systems, RAG, LangChain, NLP, Sentiment Analysis, Financial Analysis

Interests

- Reading: Investment literature, self-help books, and philosophical texts including Bhagavad Gita
- Finance: Following market trends and investment strategies
- Music: Listening to diverse genres

Certifications

- LLM's Course
- Hugging Face
- https://huggingface.co/learn/llm-...
- Introduction to Large Language Models
- Google Cloud Skills

Volunteering

- Vizianagaram Municipal Corporation

Municipal Operations Assistant

May 2025 - June 2025

Vizianagaram

 - Assisted municipal office with digital operations and document management systems
 - Collaborated with government officials on digital documentation and data entry processes

Awards

- Semifinalist - Amaravati Quantum Valley Hackathon 2024
- AQVH and APSCHE
- September 2025
- https://aic.apsche.ap.gov.in/hacka...
- Developed QuantumLeap portfolio optimization system using quantum-inspired QAOA algorithms for Indian stock market portfolio optimization.

Publications

- Maximizing Sharpe Ratio Through QAOA : A Hybrid Quantum-Classical Portfolio Optimization Framework for Indian Equity Markets
- October 2025
- Status: Under Review | 2025
- Co-authored research paper on quantum-inspired algorithms for financial portfolio optimization, currently under review by Amaravati Quantum Valley Hackathon organizers for potential publication

Languages

- English
- Fluent (Professional working proficiency)
- Telugu
- Native

- QuantumLeap

October 2025 - September 2025

Portfolio Optimization System

https://quantumleap-optimizer.onrender.com/

 - Developed quantum-inspired QAOA algorithm for Indian stock portfolio optimization with multiple strategy options
 - Implemented optimization strategies including Max Sharpe Ratio, Min Variance, and Max Return with customizable constraints
 - Added configurable parameters for risk adjustment, correlation constraints, and diversification targets to enhance portfolio quality
 - Built interactive visualization interface for risk-return analysis and optimal portfolio allocation recommendations
 - Semifinalist at Amaravati Quantum Valley Hackathon 2025
 - Tech: Python, Quantum-Inspired Algorithms, Financial Data APIs, Modern Portfolio Theory, NumPy, Pandas

Quantum Algorithms, Portfolio Optimization, Financial Modeling, QAOA, Risk Analysis, Python

- Hush.io

August 2025 -September 2025

Ephemeral Messaging Application

https://hush-io-chgx.onrender.com/

 - Built privacy-focused messaging platform with zero data persistence and auto-deletion mechanism for ephemeral communication
 - Designed stateless architecture requiring no user authentication or database storage to ensure complete anonymity
 - Implemented real-time communication protocols using WebSockets for instant message delivery
 - Created responsive interface with automatic message cleanup to maintain privacy-first approach
 - Tech: WebSockets(Socket.io) , Real-time Communication, Privacy-First Architecture, JavaScript, E2E, Password hashing

WebSockets, Real-time Communication, Privacy Architecture, Stateless Design, Encryption

Education

- JNTU-GV College of Engineering Vizianagaram

Engineering and technology

Computer science and engineering

8.0 GPA

https://jntugvcevedu.in/

Pursuing a B.Tech in Computer Science and Engineering at JNTU-GV College of Engineering Vizianagaram, with an 8.0 GPA, focusing on data structures, algorithms, and software engineering projects, including web applications and AI-based tools.

Skills

Python	Fast API	LLM's	RAG	Hugging Face Transformers
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SQL	GIT	HTML/CSS	NLP	Data structures and algorithms
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Gen AI	React	C language	Data Analysis	Algorithmic Trading
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