

# GANASYAM MANI SANKAR BUGATHA

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✉ 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-contra-signal.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

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

### 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

FastAPI, PostgreSQL, JWT Authentication, Geolocation Tracking, Real-time Analytics, REST API

### 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

Engineering and technology

### Vizianagaram

Computer science and engineering

8.0 GPA

🔗 <https://jntugvcev.edu.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

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### Fast API

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### LLM's

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### RAG

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### Hugging Face

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### SQL

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### GIT

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### HTML/CSS

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### NLP

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### Data

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### Gen AI

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### React

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### C language

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### Data

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### Analysis

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### Algorithmic

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### Trading

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