

Darsi Gangothri

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SUMMARY

AI Engineer with **2.5+ years** building production LLM systems. Architected an AI tutoring platform with multi-model fallback, RAG pipelines, and Socratic agents serving **15,000+ students** across **120+ schools** with **1,000+ DAU**. Built **3** open-source AI tools: multi-agent research system (LangGraph), RAG knowledge assistant with evaluation pipeline, and code root-cause analyzer using AST parsing.

EXPERIENCE

Software Developer R&D

Bryt Learning

Dec 2023 | Present

Hyderabad, India

Production AI Systems (Brainie AI)

- **Architected Brainie AI Assistant**, a production LLM tutoring agent with multi-model fallback (GPT-4o, Gemini, Claude) via LiteLLM, delivering real-time Socratic scaffolding to **1,000+ DAU** with **99.5%+ uptime** through cost-optimized provider failover.
- **Built Socratic Hints pipeline**, an offline LLM-powered system generating pedagogical hint sequences for **10,000+ MCQs** with TTS audio (Google TTS + S3), enabling guided learning without live API calls.
- **Implemented voice-based AI interaction**, end-to-end STT to LLM reasoning to TTS pipeline for spoken Q&A.

Adaptive Learning Architecture

- **Designing adaptive learning microservice** using Django with Goal Creator, Resolver, and Scheduler pipeline dynamically generating personalized study plans based on student proficiency scoring and mastery-debt algorithms.

Platform & Infrastructure

- **Owned Tutor.ai end-to-end**, flagship AI education app (Flutter), full ownership of architecture, feature delivery, releases, and production stability across **120+ schools**.
- **Built analytics pipelines** with PostHog + Google Analytics tracking engagement, practice rigor, and learning outcomes.
- **Architected offline-first sync** using Hive local DB + custom daemon queue, ensuring AI features degrade gracefully offline.
- **Migrated cloud infrastructure**: Firebase RTDB, Cloud Run Functions to Node.js v22; optimized real-time chat at scale.

Full Stack Developer Intern

ZealYug

Feb 2023 | Apr 2023

Remote

- Built backend APIs for a hiring platform using Django REST Framework. Awarded **Programmer of the Week**.

PROJECTS

ResearchCrew | LangGraph, Gemini/OpenAI, Tavily, FastAPI, WebSocket, React

[GitHub](#) | [Demo](#)

- **4 autonomous LLM agents** (Planner, Searcher, Analyst, Synthesizer) collaboratively research any topic and produce cited reports using a **LangGraph state machine** with iterative refinement loops.
- Real-time agent reasoning via **WebSocket streaming**; extensible capabilities through **MCP tool-calling protocol**.

DocMind | LangChain, ChromaDB, OpenAI/Gemini, FastAPI, Streamlit

[GitHub](#) | [Demo](#)

- Production-grade **RAG system** for document Q&A with recursive chunking, **ChromaDB vector search + MMR reranking**, source-cited answers, multi-provider LLM support.
- **4-metric evaluation pipeline** (Faithfulness, Relevance, Context Precision, Context Recall) via RAGAS for retrieval quality measurement.

DebugLens | Tree-sitter, LangChain, FastAPI, Python/JS/Go AST

[GitHub](#) | [Demo](#)

- Traces call chains through codebases using **Tree-sitter AST parsing** (Python, JS, Go), then **LLM identifies root cause** and suggests fixes with StackOverflow/GitHub Issues context.

TECHNICAL SKILLS

AI/LLM: LLM Integration (GPT-4o, Gemini, Claude), LiteLLM, LangChain, LangGraph, RAG (ChromaDB, Vector Search, MMR), Multi-Agent Orchestration (MCP, State Machines), Prompt Engineering, TTS/STT, RAGAS Evaluation

Languages: Python, Dart, JavaScript, SQL

Frameworks: Django, FastAPI, Node.js, Flutter (Riverpod, Hive, FCM, GraphQL), React, Streamlit

Cloud/Data: Firebase, Google Cloud, AWS S3, Docker, PostHog (HogQL), Google Analytics

DSA: **800+** problems on LeetCode (Arrays, Trees, Graphs, DP, Sliding Window, Backtracking)

EDUCATION

B.Tech in Computer Science & Artificial Intelligence

KKR & KSR Institute of Technology and Sciences, Guntur

Aug 2020 | Jun 2024

CGPA: **9.14 / 10**

LEADERSHIP

- **Leading Bryt's mobile + AI team**: driving technical decisions, code reviews, and architectural direction across multiple AI-powered education apps.
- **Former Technical Head, Department of AI**: led **250+ students**, organized workshops, hackathons, and hands-on technical events at university.