

# AYUSH TYAGI

## AI Engineer

tyagiayush239@gmail.com | +91 9873545894 | East Delhi, India | LinkedIn | Github

### PROFESSIONAL SUMMARY

AI Engineer with hands-on experience in LLM engineering, RAG pipelines, and agentic AI systems, focused on building reliable, production-oriented GenAI applications. Experienced in developing self-verifying agents, HR automation bots, and retrieval-based assistants using OpenAI SDK, LangGraph, MCP, and CrewAI. Additional exposure to Unity 2D game development, contributing to strong problem-solving, state management, and system design skills.

### EXPERIENCE

#### Intensity Global Technologies Ltd, AI Engineer (Full-Time)

- Developed an AI-powered HR bot to store, retrieve, and answer employee-related information using LLMs and retrieval-based workflows.
- Built conversational logic for structured and context-aware employee queries.
- Assisted in validating and refining LLM responses to improve accuracy, reliability, and usability.

#### Tara Application, Application Developer (Intern / Trainee)

- Supported mobile application UI updates and testing cycles.
- Assisted in usability improvements and performance optimization.

### EDUCATION

#### B.Tech in Computer Science, JIMS, Delhi

2021 – 2025

CGPA: 8.3

### SKILLS

**Core AI & Generative AI:** LLM Engineering, RAG Pipelines, Embeddings, Retrieval Optimization, Prompt Engineering, Agentic AI Systems, Tool Calling, Memory Handling, QLORA Fine-Tuning

**Agentic & LLM Frameworks:** OpenAI SDK, LangGraph, MCP (Model Context Protocol), CrewAI

**Programming Languages:** Python, JavaScript, TypeScript, C#

**Supporting Skills:** Unity 2D (game logic, state handling, C# scripting)

### PROJECTS

#### Sidekick - Self-Verifying AI Agent, GitHub

- Built a **goal-driven agentic AI system** that functions like a personal co-worker, executing multi-step tasks and validating completion against explicit success criteria instead of relying on one-shot responses.
- Implemented **self-verification, retry loops, and controlled termination**, enabling the agent to automatically self-correct, request clarification when needed, and produce reliable, production-ready outcomes.
- Designed a **tool-aware execution architecture** with dynamic tool selection (web search, browser automation, code execution, file handling), focusing on correctness, reliability, and measurable task completion.

#### Ayush Personal Chatbot (RAG System), LinkedIn post

- Developed a **production-grade Retrieval-Augmented Generation (RAG) chatbot** using **Llama-3 with NVIDIA NIM**, designed to answer personalized questions with high accuracy, low hallucination, and consistent behavior.
- Built an **end-to-end RAG pipeline** including LLM-assisted chunking, embeddings (MinILM-L6-v2), vector search with ChromaDB, query rewriting, reranking, and strictly context-grounded answer generation.
- Integrated **tool calling, memory logging, résumé and LinkedIn data ingestion**, and deployed a **Gradio-based conversational interface** on Hugging Face Spaces for real-world usability and evaluation.

#### AI Alter Ego Assistant, Live

- Designed an **autonomous AI personal assistant** with **structured reasoning, state tracking, and memory-based conversation logic**, enabling coherent multi-turn interactions instead of isolated responses.
- Built a **tool-driven conversational system** using **LLaMA-3 8B Instruct on NVIDIA NIM**, allowing the assistant to log user details, track unanswered queries, and generate context-aware responses from résumé and LinkedIn data.
- Deployed a **Gradio-based conversational interface** on Hugging Face Spaces, focusing on **controlled agent behavior, consistency, and professional-grade conversational reliability**.

#### Mall Assistant (GenAI RAG System), Live

- Built an AI-powered mall assistant using RAG architecture for navigation and service-related queries. Used Excel sheets as the structured data source for store, category, and service information. Implemented structured prompting and retrieval workflows for context-aware responses.

#### Space Robo Ranger (Unity 2D - Supporting Project), Live

- Developed a 2D space shooter to practice game state management, AI behavior logic, and real-time interaction.

### CERTIFICATIONS

- AI Engineer - Agentic Track
- Unity 2D Game Development