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AiEngg

AI Engineering 2026: Master RAG & Agents



Cohort Instructor
Tanishq Singh

Primary Student Base
Software / AI Engineers

Program Overview



The Problem

90% of developers try and adopt AI, but only 15% successfully deploy systems that deliver ROI[1]. The gap is due to implementation challenges, such as RAG accuracy ceilings, Agent Orchestration, Hallucinations, and Lack of production-grade evaluation.

Addressing these challenges requires a system-level design perspective. That is why this 8-week intensive cohort is designed to teach software engineers how to build, evaluate, and ship reliable RAG and agentic AI systems.

The Solution

- An 8-week intensive cohort designed for software and AI engineers
- Hands-on workshops with Python, RAG, and Agents
- Deep dive into RAG architectures, multi-agent systems, and evaluation frameworks
- Lifetime access to all recordings and course material post-cohort completion.
- Attendance tracking (on request), Wednesday office hours and Certificate of Completion for all students

[1] [Coderpad 5000+ Developer Survey](#).

Program Highlights



16
Live Classes

in 8 weeks

Retrieval-
Augmented
Generation
& Agents

production-focused
curriculum

Hands-on
Capstone
Project

Industry-relevant project
for AI engineers

Start Date: September 12th, 2026.

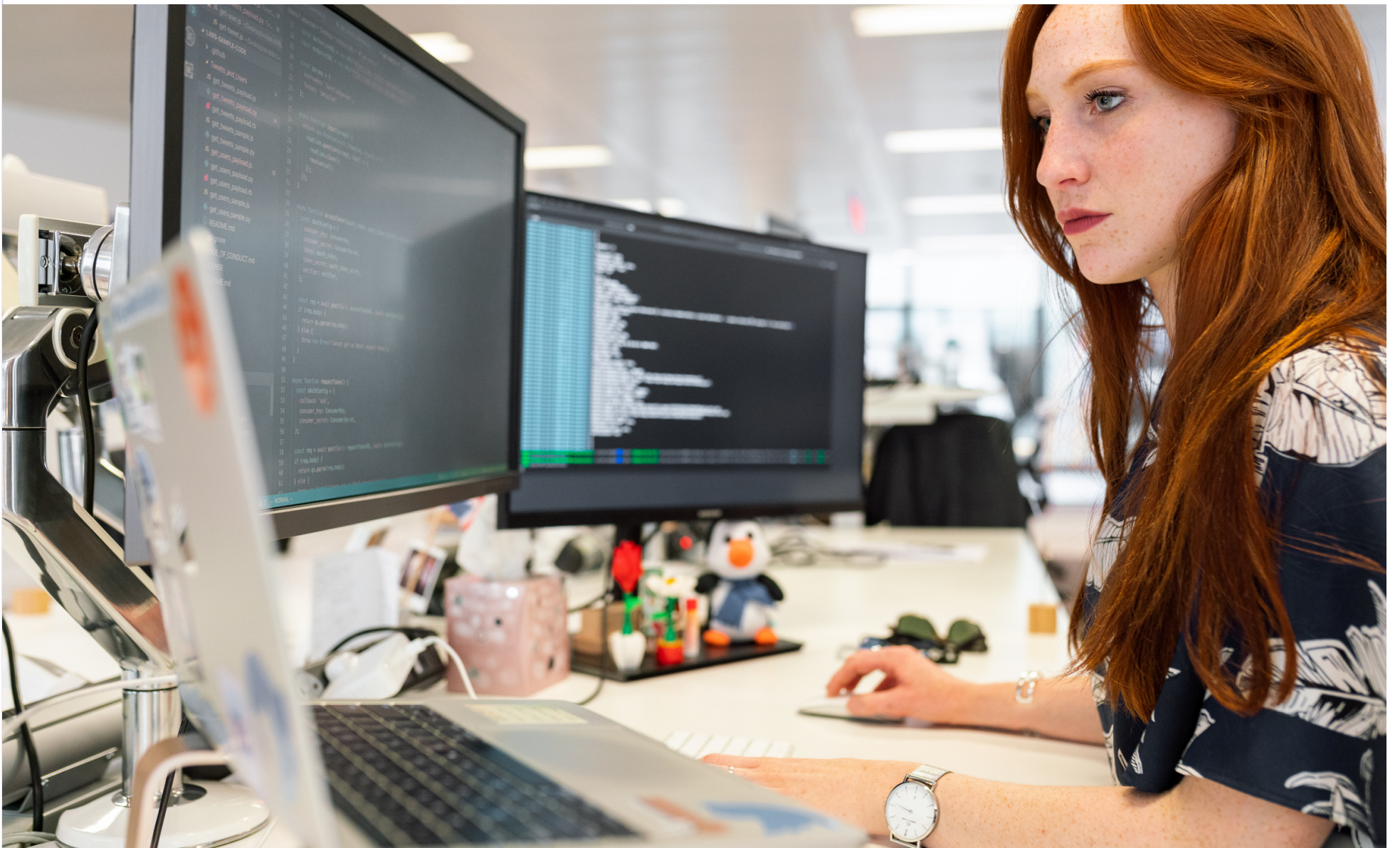
End Date: November 1st, 2026

Class Time : 9 AM – 10:30 AM IST, Saturday & Sunday

Primary Audience: Engineers with a technical background.

Coding Expected: Yes.

What You'll Learn



Key Skills

1. You Master AI Frameworks

Learn LangGraph, Pydantic AI, and vector databases to build production-grade RAG and agentic systems.

2. You build AI Projects

Identify use cases where AI can help improve your product and business.

3. You make AI Reliable

Productionize reliable AI applications using guardrails, LLM-as-a-Judge evaluations, and observability.

This is a live, interactive cohort with a dedicated instructor. Students are expected to code and implement AI systems during the program. You'll leave interview-ready on RAG and agentic AI, with the vocabulary, tradeoffs, and design patterns that come up in real AI Engineering interviews.

Cohort Curriculum

Week 1-4: Foundations & RAG

Week 1: Terminology & Prerequisites

Core LLM terminology (tokens, vectors, attention), how LLMs are trained, and prompting basics. Make your first LLM call and compute vector similarity.

Week 2: RAG Components & Architecture

What is RAG, chunking strategies, embedding models, and vector databases (indexing, similarity scoring).

Week 3: Advanced RAG

Why naive RAG hits accuracy ceilings, Hybrid search, query rewriting (HyDE, multi-query), cross-encoder reranking, and RAG-specific evals.

Week 4: RAG Architectures

Common pitfalls in RAG, types of architectures (GraphRAG, KAG, Agentic RAG, etc), and choosing the right one.

Weeks 5–8: Agents & Capstone

Week 5: Single-Agent Systems

What is an agent, tool/function calling, the ReAct pattern, and Pydantic AI. Failure points for Single-Agent systems.

Week 6: Multi-Agent Systems

What are multi-agent systems, agentic design patterns, building agents with LangGraph, and problems unique to multi-agent (orchestration, information isolation, planning).

Week 7: Context Engineering, Memory & Evals

Context engineering vs. prompt engineering, memory systems (short-term, long-term), managing memory in multi-agent systems, and evals. Run a full eval suite on your Week 6 pipeline.

Week 8: Capstone Project

AI engineering best practices, tradeoffs (cost vs. accuracy vs. latency), architecture reviews, and capstone scoping. Live capstone demos with peer Q&A and structured feedback.

4

Weeks of RAG
Mastery

4

Weeks of Agents &
Evals

60

Days of teacher
support

∞

Unlimited
Community access

Your Instructor



Tanishq Singh
AI Engineer | IIT Madras |
University of Birmingham

Tanishq is an AI Engineer and Master's graduate from **IIT Madras** and the **University of Birmingham**, with production experience across **FinTech**, **HealthTech**, and **EdTech**. He has built end-to-end RAG pipelines and multi-agent systems using tools like **LangGraph**, CrewAI, and AWS Bedrock, with deep expertise in agent orchestration, context engineering, and memory for agentic systems. His evaluation work spans **hallucination detection**, prompt injection, and guardrail testing.



LinkedIn



YouTube



X

Who Should Attend?

This program is for software engineers who want to build production-grade AI systems. We expect prior coding experience, and a basic understanding of software systems.



Ideal Role

Software Engineer,
Staff Engineer,
Tech Lead,
Senior Managers

Coding Experience

Proficient in one
programming
language.

Prerequisites

Prerequisites of
ML and AI are
contained in the
course.

Cohort Seat Pricing



Cohort Fee	₹1,00,000 / \$1100
Expected ROI (In current year, 2026)	10-20 hrs saved per month 2-5 AI opportunities recognized 2-5 AI projects built or improved

What's Included?



Workshop & Materials

- Interactive live classes with code and diagrams
- Class notes for every topic
- Weekly assignments: hands-on code labs and conceptual exercises
- Curated resource library and reading list

Ongoing Support

- Wednesday office hours (1 hour, open Q&A)
- Lifetime access to recordings and course material
- Peer accountability groups.
- Certificate of Completion.

Ready to Build AI Systems?



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Duration

12th September - 1st November 2026

Class Time

9 AM - 10:30 AM IST on Saturday & Sunday

Email

hello@aiengg.dev

Website

www.aiengg.dev