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AiEngg

AI Engineering 2026: Master RAG & Agents

AIENGG

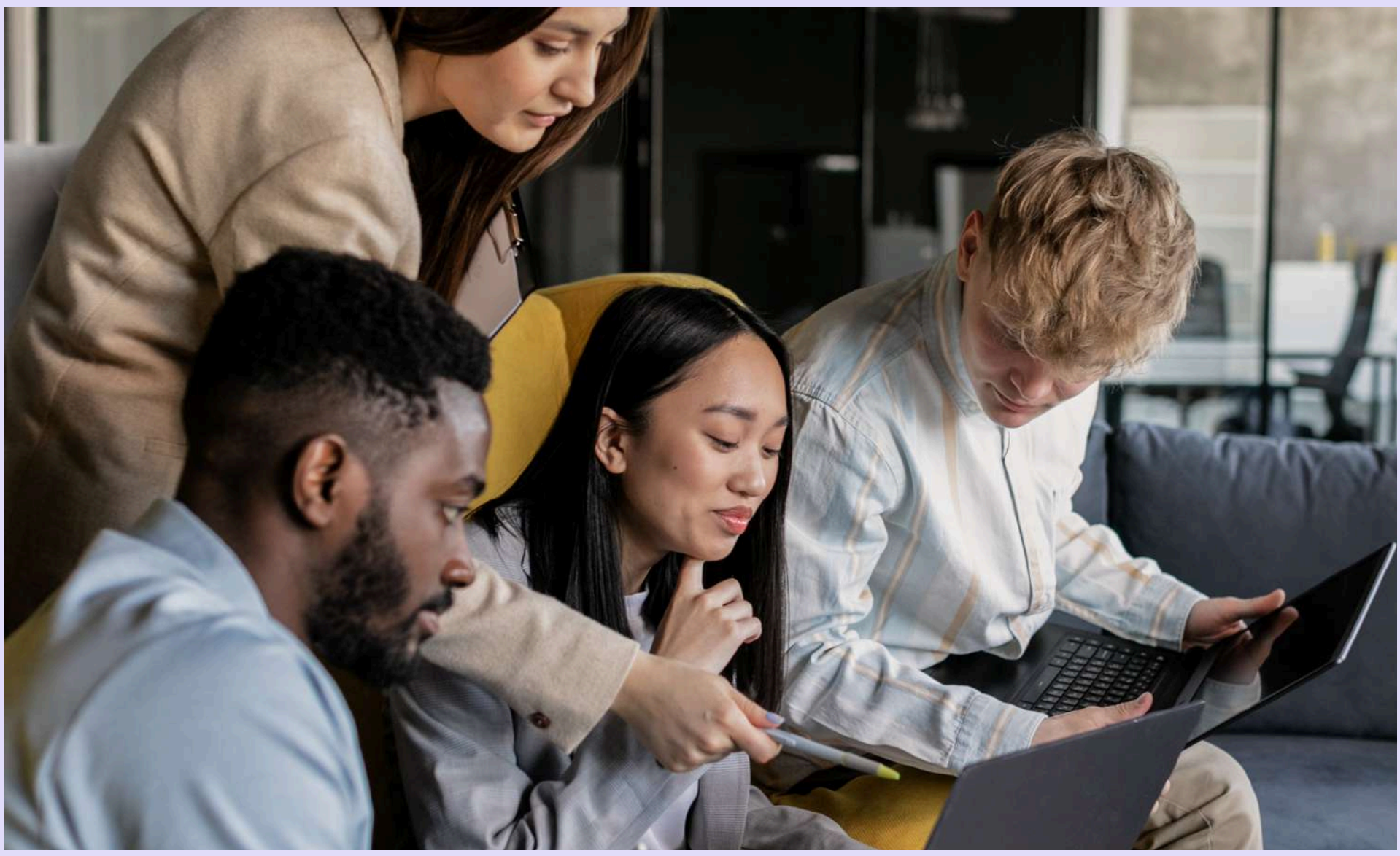
Cohort Instructor

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.

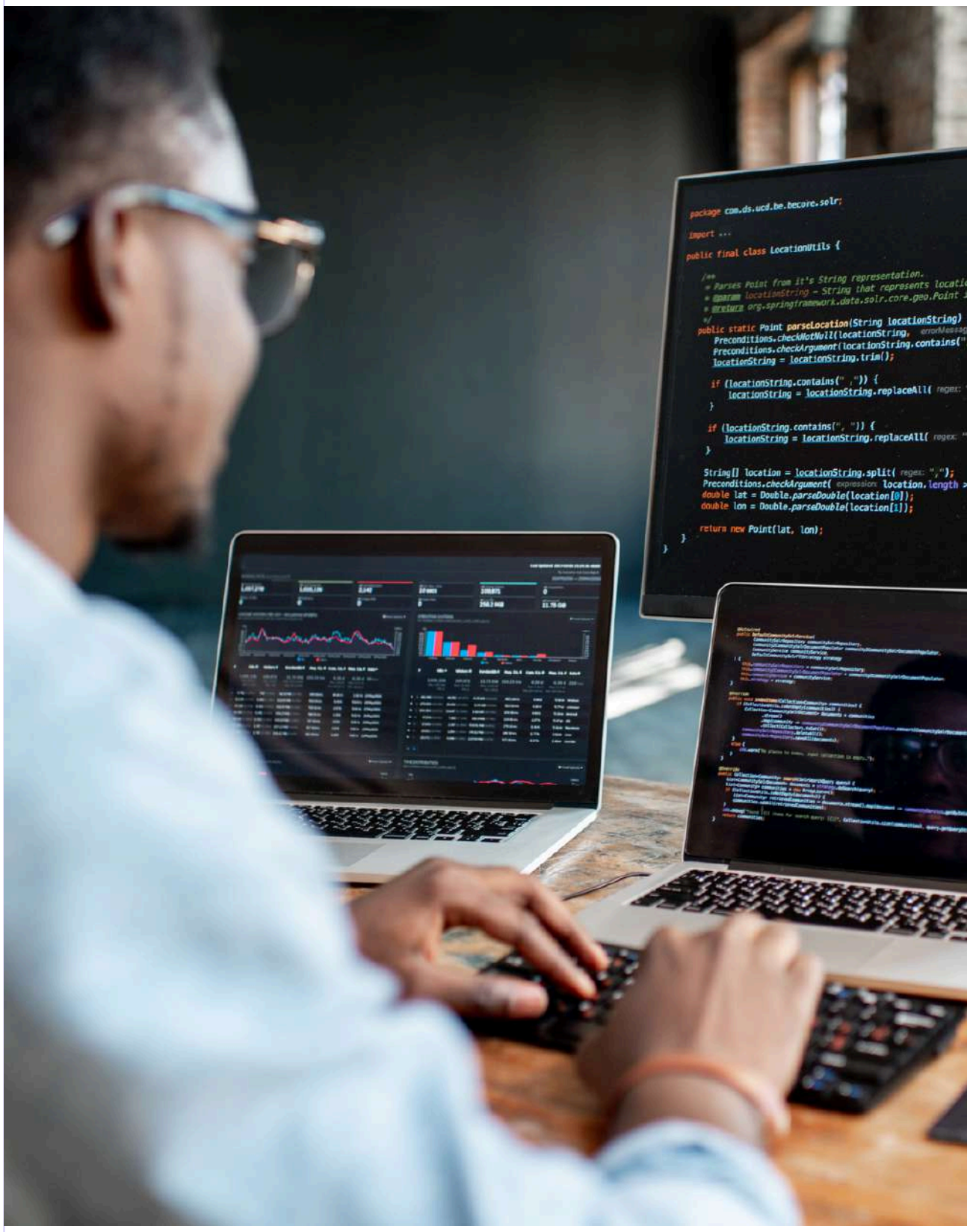
Addressing these challenges requires a system-level design perspective. That is why this 8-week intensive cohort is designed to teach software engineers how to build, evaluate, and ship reliable RAG and agentic AI systems.

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: June 06, 2026.

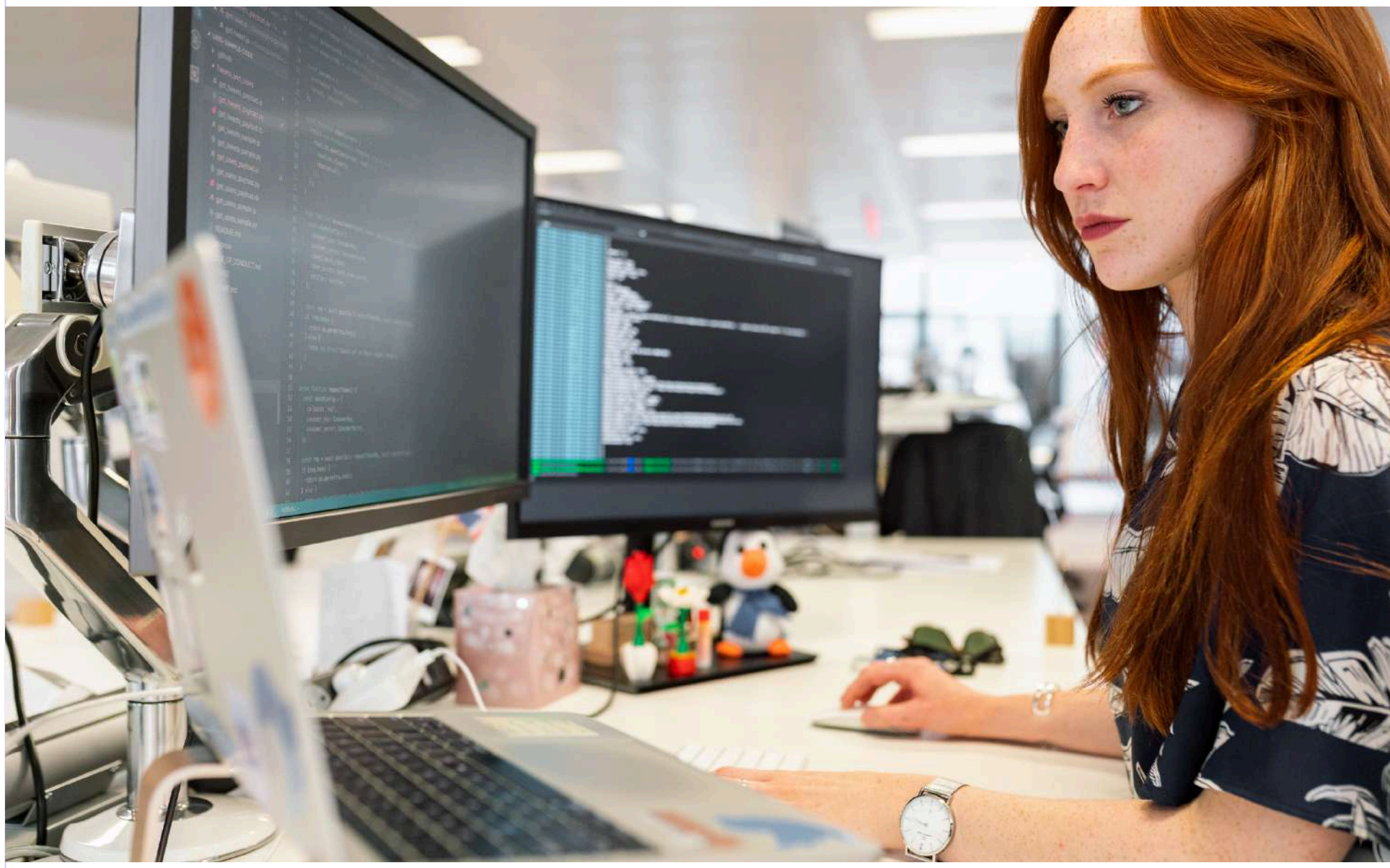
End Date: July 26, 2026.

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, Multimodal RAG), 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	4	60	∞
Weeks of RAG Mastery	Weeks of Agents & Evals	Days of teacher support	Unlimited Community access

Your Instructor

Tanishq Singh

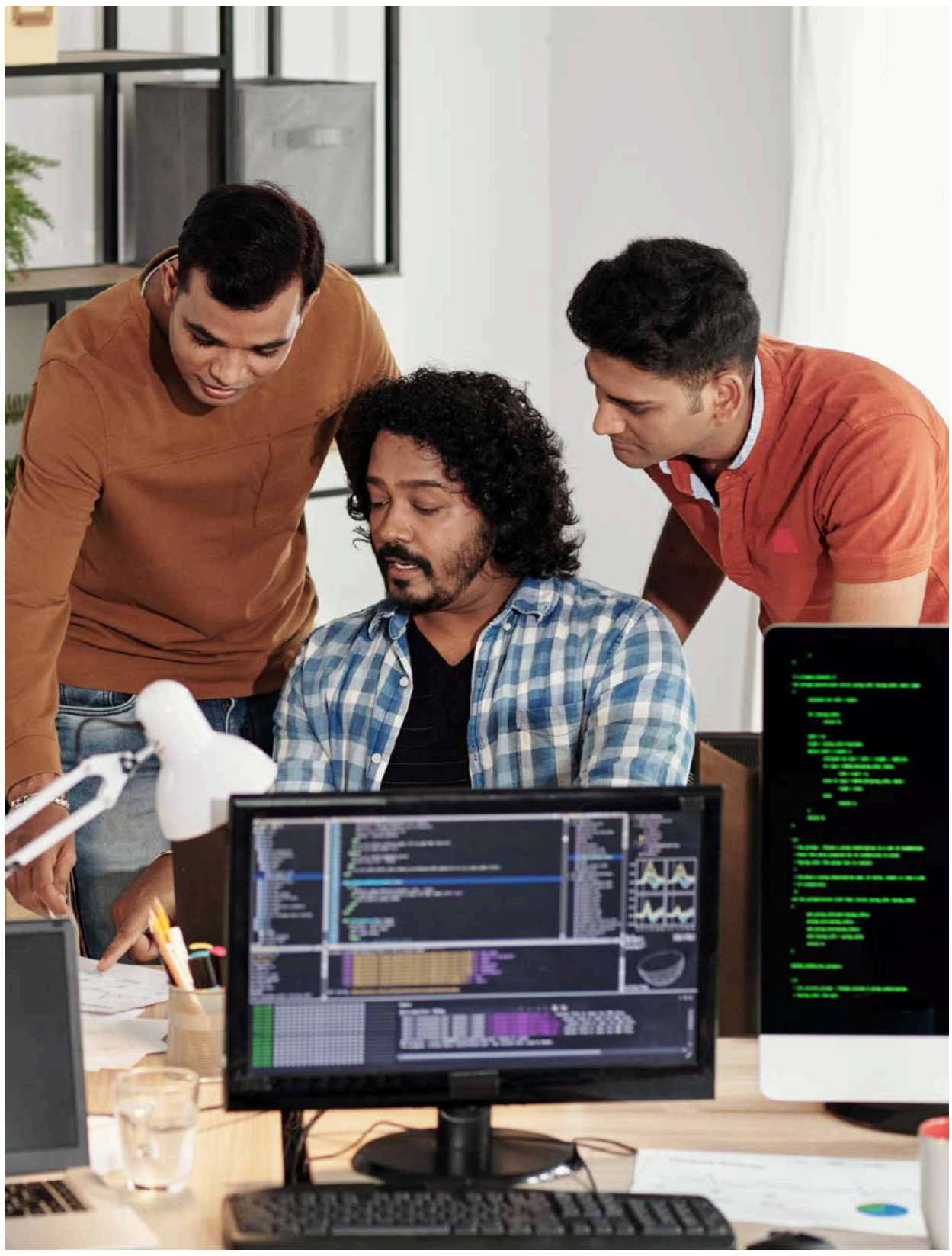
AI Engineer | IIT Madras | University of Birmingham

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?

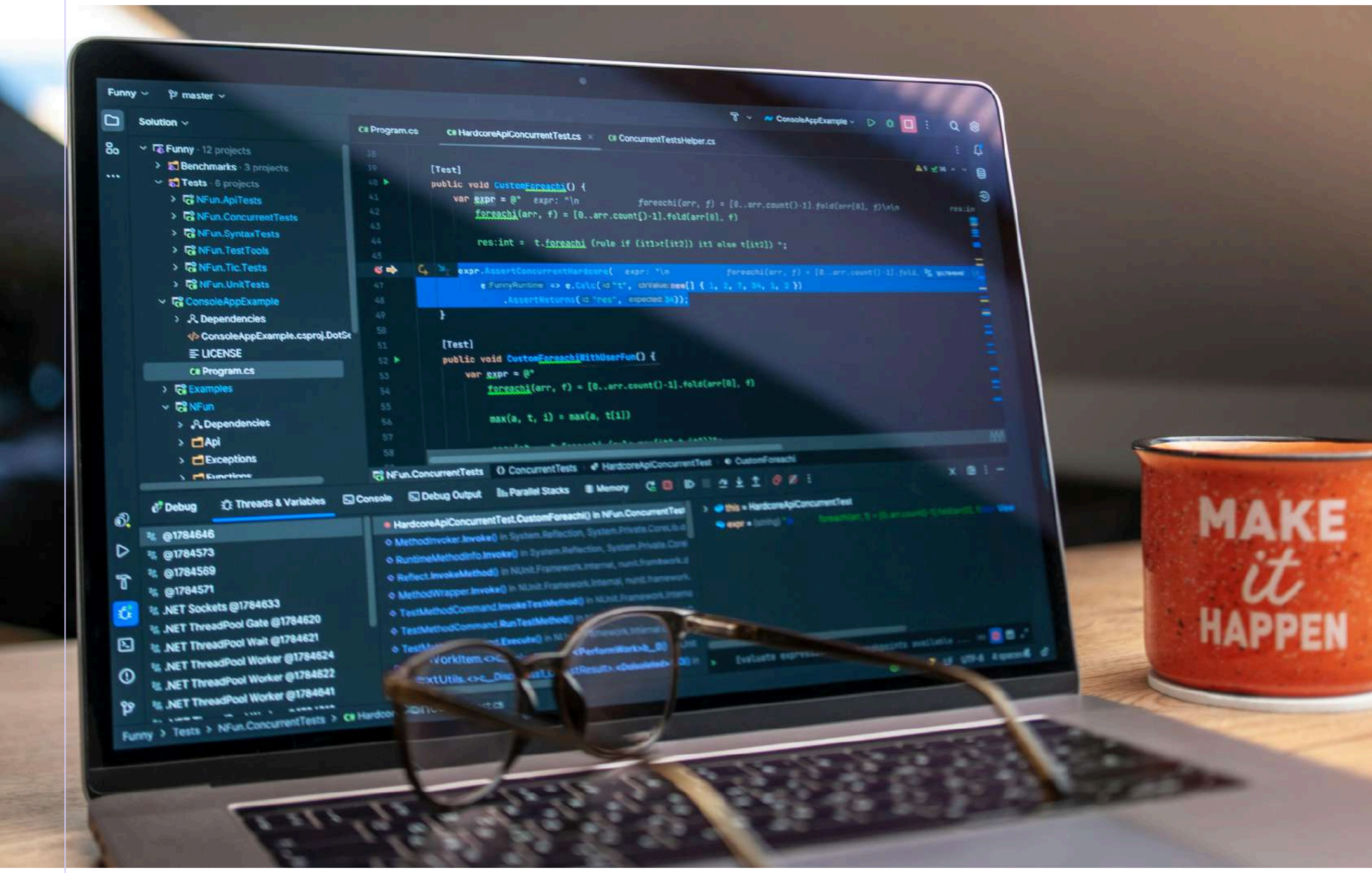
Workshop & Materials

- 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

06 June - 26 July 2026

Class Time

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on Saturday & Sunday

Email

hello@aiengg.dev

Website

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