aiengg.dev

AI Engineering 2026: Master LLMs, Vector DBs, RAG & Agents

AIENGG

Cohort Instructor

Gaurav Sen

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 agent orchestration and LLM hallucination.

Addressing these challenges requires a broader, system-level design perspective[2]. That is why this 10-week AI Engineering program is designed to teach software engineers essential AI concepts in depth.

The Solution

- A 10-week intensive cohort designed for software and AI engineers
- Hands-on tool workshops with Python, RAG and Agents
- Deep Dive into Transformers and LLM Architecture
- Lifetime access to all recordings and course material post-cohort completion.
- Attendance tracking (on request), Certificate of Completion for all students

[1] Coderpad 5000+ Developer Survey
[2] Confucius Code Agent by Meta & Harvard

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, Senior Managers

Coding Experience

Proficient in one programming language.

Prerequisites

Prerequisites of ML and AI are contained in the course.

Cohort Curriculum

Week 1-2: Foundation

Week 1.1: Tokenization, Vectorization, and Attention
Understand the fundamental building blocks of LLMs with tokenization, vectorization and attention..

Week 1.2: LLM Training Lifecycle
Learn the end-to-end lifecycle of an LLM, from data processing to pre-training, post-training and inference.

Week 2.1: Fine-tuning LLMs for Work
Learn how LLMs are quantized for fast processing, and how to fine-tune models to meet specific business requirements.

Week 2.2: Building AI-automated workflows
Understand how tools like Claude can be effectively used to generate code, documents, and workflows. We cover cowork, skills, Claude Code, and subagents..

Week 3-4: AI Engineering for Production

Week 3: Retrieval Augmented Generation
Learn chunking strategies, data ingestion, reranking, indexing, vector databases, and other techniques for retrieval augmented generation.

Week 4: Hands-on RAG Implementation
An interactive project where students learn to code a RAG-based application and learn best practices for AI safety.

Week 5-8: Agentic Systems & Evals

Week 5: AI Agents and Tool Calling
Learn what is an Agent, how they are different from plain LLMs, Tool Calling, ReAct pattern and Agent Orchestration.

Week 6: MCP, Context Engineering, Multi-Agent Systems
Code an AI Agent with MCP and memory, with orchestration for multi-agent systems.

Week 7: Evals
Build evals for AI apps with LLM as a judge, manual SME queries, and Eval frameworks.

Week 8: Agentic System Design
Learn the best practices when building agents, how Agentic systems are deployed, scaled and managed with observability and gaurdrails.

Week 9-10: Image Models & Capstone

Week 9: Image Models
Learn how multimodal models are trained with images and video. We cover CLIP, native multimodality, and diffusion models.

Week 10: Capstone Project
Build your industry-relevant AI project in two weeks, using the lessons from the cohort.

4
Weeks of foundation

6
Weeks of Production

90
Days of teacher support

∞
Unlimited Community access

Program Highlights

29 Live Sessions

in 10 weeks

Advanced AI Concepts

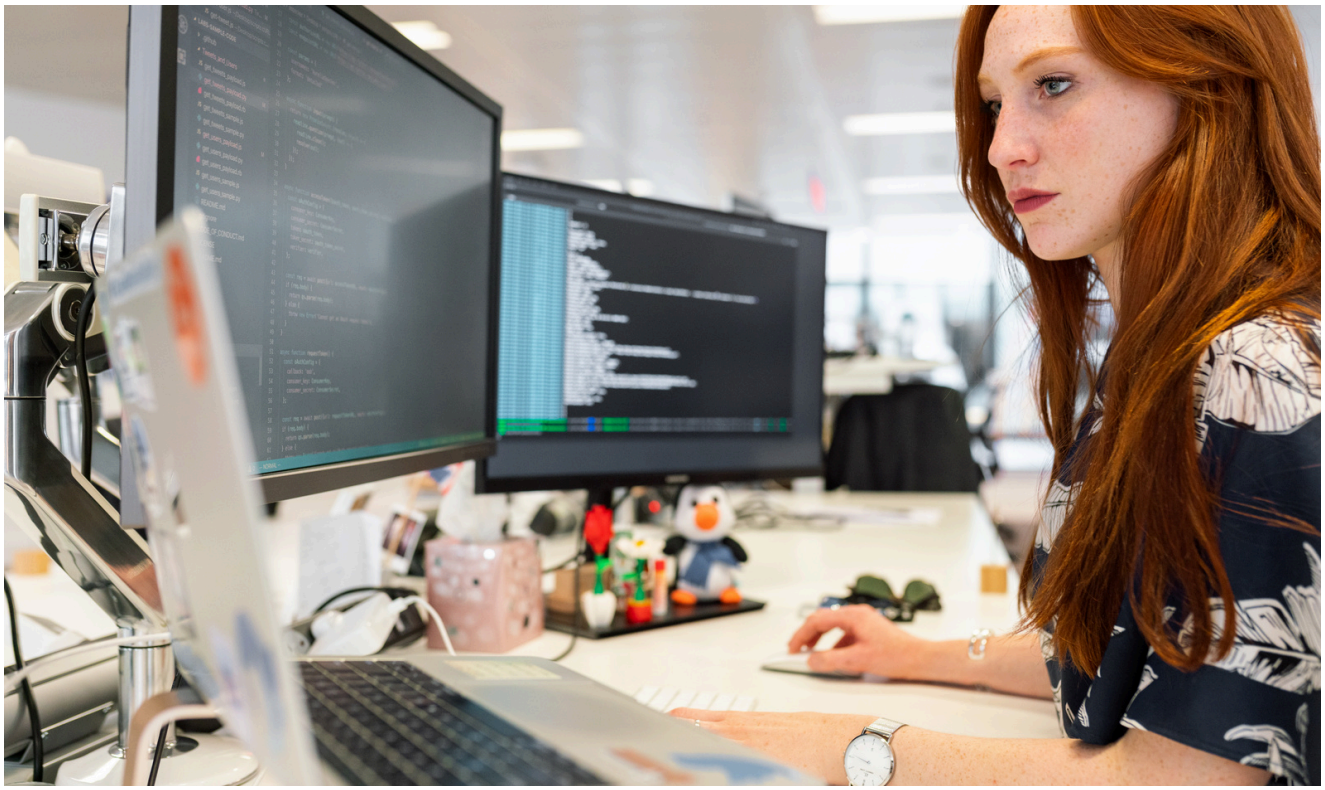
including Code & Agents

Hands-on Capstone Project

Industry-relevant project for AI engineers

Start Date: July 18, 2026.
End Date: September 20, 2026.
Primary Audience: Engineers with a technical background.
Coding Expected: Yes.

What You'll Learn



Key Skills

1. You Master AI Frameworks
Learn different LLMs and frameworks to build applications.

2. You build AI Projects
Find use cases where AI can help improve your product and business.

3. You make AI Reliable
Productionize reliable AI applications using guardrails and model evaluations.

This is a live, interactive cohort with a dedicated instructor and teaching assistants. Students are expected to code and implement AI systems during the course of the program. You'll leave with templates, frameworks, and a concrete 65-day action plan.

Your Instructor

Gaurav Sen

Ex-Software Engineer @ Uber, Directi

Gaurav Sen is a Software Engineer with experience designing and building AI systems at InterviewReady. He has also worked with companies like Docker and NeonDB in explaining how to build reliable AI systems. Gaurav has previously spoken at the **University of Houston-Texas, IIT Gandhinagar, and BITS Hyderabad**.

LinkedIn | YouTube | X

Cohort Seat Pricing

Early Bird Offer Valid until July 1, 2026	**₹1,20,000 / $1400** ~~₹1,50,000 / $1750~~
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?

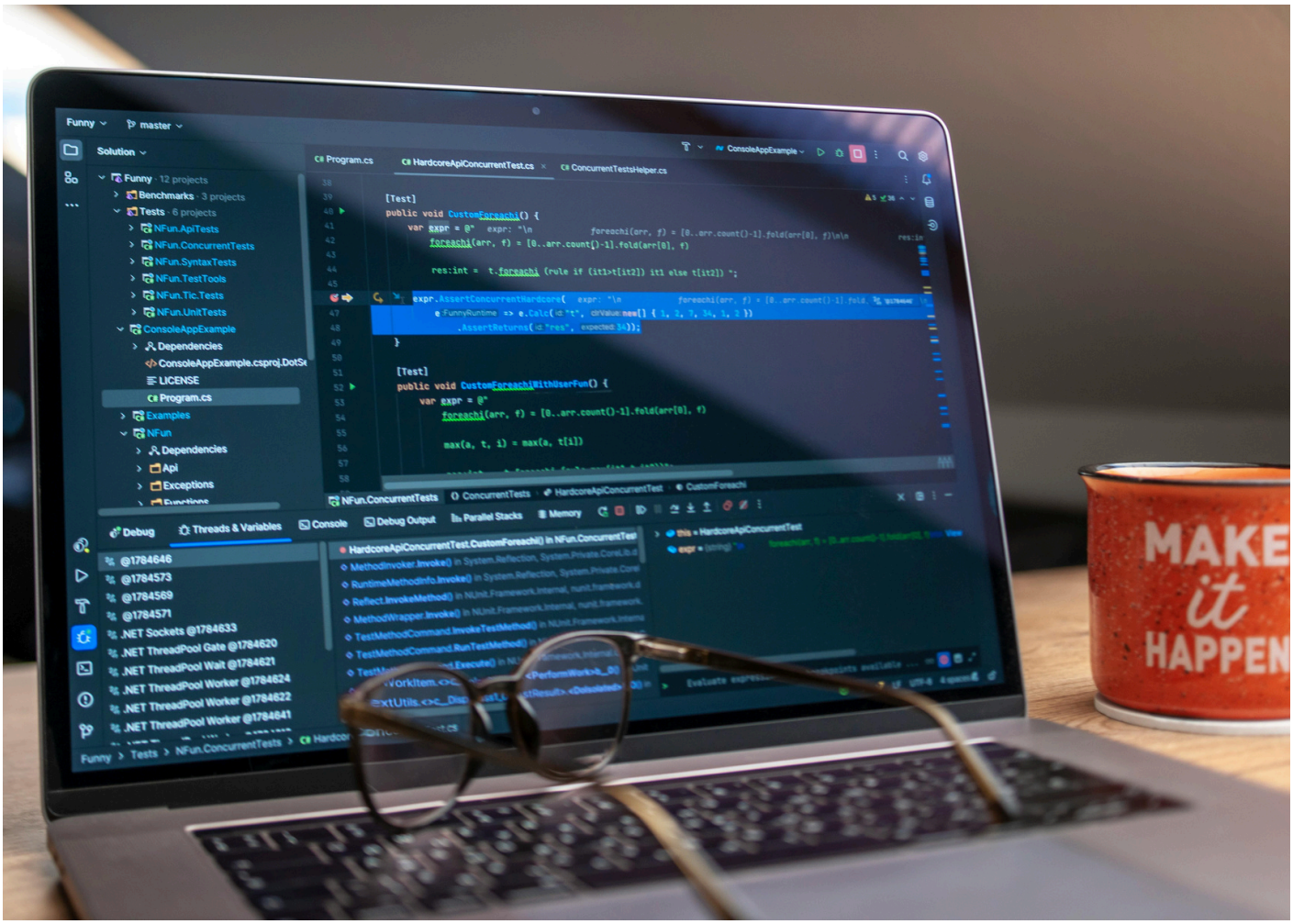
Workshop & Materials

- Interactive live classes with code and diagrams.
- Complete LLMs and tool evaluation matrix guide.
- Curated resource library.

Ongoing Support

- Access to private alumni community.
- Monthly check-in calls for 90 days.
- Office hours with the instructor.
- Peer accountability groups.
- Certificate of Completion.

Ready to Build AI Systems?



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Duration

18 July - 20 September 2026

Class Time

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

Email

contact@aiengg.dev

Website

www.aiengg.dev