

Agentic AI Pioneer Program

Roadmap



Learning Roadmap

- 1 — Introduction to Generative AI
- 2 — Build Your First Agent
- 3 — Learn Coding for Agentic AI
- 4 — Learn LangChain, Prompt Engineering, RAG
- 5 — Build an AI Agent from Scratch
- 6 — Build ReAct Agents with LangChain
- 7 — Build Your First AI Agent with LangGraph, Autogen, CrewAI
- 8 — Learn Agentic AI Architectures & Design Pattern
- 9 — Build Advanced AI Agents with LangGraph, Autogen, CrewAI
- 10 — Build Agentic RAG Systems with LangGraph
- 11 — Practical Case-Studies using LangGraph, Autogen and CrewAI

Unlocking the Power of AI Agents: Automate, Innovate, Dominate

- **Introduction to Generative AI**

Gain foundational knowledge of Generative AI, understanding the different ways to use LLMs. This module introduces you to the world of AI-generated content and its impact on day-to-day work.

- **Build Your First Agent**

Learn the essentials of AI Agents using no-code tools, from understanding their use cases to building, customizing, and deploying them to solve and automate real-world challenges.

- **Learn Coding for Agentic AI**

Master essential coding skills required for building AI agents. This module covers the specific programming languages, libraries, and tools you'll need to create effective, functional AI agents.

- **Learn LangChain, Prompt Engineering
and RAGs**

Dive into powerful frameworks like LangChain for building LLM applications and agentic workflows, Prompt Engineering for instructing LLMs for problem solving, and RAG (Retrieval Augmented Generation) for creating smarter, context-aware GenAI Apps.

- **Build an AI Agent from Scratch**

Step-by-step guidance on building a fully functional AI agent from the ground up. Learn how to integrate large language models, prompts, tools, handle data, and implement decision-making logic.

- **Build ReAct Agents with LangChain**

Learn how to create ReAct (Reason and Act) agents using LangChain and extend them to be multi-user conversational agents. These agents can reason through tasks, making decisions autonomously to accomplish more complex objectives.

- **Build Your First AI Agent with LangGraph, Autogen and CrewAI**

Create a simple AI agent using LangGraph, Autogen, and CrewAI. This module teaches how to connect prompts, tools, and LLMs to develop agents that can leverage tools to automate simple tasks and workflows.

- **Learn Agentic AI Architectures & Design Patterns**

Explore architectural frameworks and design patterns that are the industry standard for building scalable, efficient AI agents. Understand how to design and build simple and complex agentic systems for maximum performance and flexibility.

- **Build Advanced AI Agents with LangGraph, Autogen and CrewAI**

Develop advanced AI agents capable of handling complex, multi-step workflows, tools, agents, and reflection. Learn to build advanced agents using the three frameworks - LangChain, AutoGen and Crew AI individually to solve and automate real-world problems.

- **Build Agentic RAG Systems with LangGraph**

Create Agentic Retrieval Augmented Generation (RAG) systems using LangGraph. These systems combine powerful retrieval techniques with AI generation, coupled with self-reflection and corrective agentic workflows to improve performance.

- **Practical Case-Studies using LangGraph, Autogen and CrewAI**

Learn how to develop systems where multiple agents work together, collaborating to solve complex tasks. This module teaches the principles of multi-agent coordination, communication, planning, reflection and problem-solving using all three popular frameworks.

Learn to Build These Powerful Agents and Lead the Era of Autonomous Intelligence!

Enroll now

Contact Us:



+91-9354711240



customersupport@analyticsvidhya.com



analyticsvidhya.com/agenticaipioneer

