



Certified ISO 9001:2015

Agentic AI Bootcamp



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About The Program

Agentic AI is transforming the way LLMs are used, moving away from prompt-based interfaces and toward autonomous agents capable of reasoning, planning, tool usage, and collaboration. This 48-hour BootCamp provides you with hands-on experience building and deploying next-generation technologies.

You will receive practical experience with CrewAI, LangGraph, and AutoGen frameworks. From memory and planning to infrastructure and SaaS deployment, you'll work on realworld applications such as CRMs, travel bots, and scheduling assistants-all in productionready settings.

Key Highlights Of The Program



48 hours of live, instructor-led training with real-time interaction



Build and deploy autonomous agents using CrewAI, LangGraph, AutoGen, and ReAct frameworks



Implement agent memory with FAISS, ChromaDB, and context-aware reasoning across tasks



Design multi-agent systems with planning, tool use, messaging, and task coordination



Advanced prompting techniques including chain-of-thought, tree-of-thought, and function calling



Production deployment with Docker, Hugging Face Spaces, and cloud CI/CD integration



Build interactive AI frontends using Streamlit and Gradio for rapid prototyping and deployment.



Build observability with latency logging, retry mechanisms, and fallback logic



Get the flexibility to choose your capstone project from the given use cases



Capstone project:

- Go-to-Market Strategy for a New Energy Drink using Agentic AI
- Multi-Agents AI for Product Launch Strategy



Ability to choose your Strategy capstone project from realworld use cases for tailored, goal-oriented learning.

Who Is This Program Ideal For?

This course is for developers, AI enthusiasts, and product teams ready to build real-world AI agents.

✓ AI/ML Engineers

✓ Backend Engineers

✓ Data Scientists

✓ Developers

✓ Data Analysts

✓ Full Stack Developers

✓ Cloud Engineers

✓ Recent College Graduates

About Agilefever

AgileFever is a globally recognized, ISO-certified EdTech leader. We specialize in delivering live, career-defining training in emerging and enterprise-ready technologies — bridging the gap between what the industry demands and what available Talent.

Our brand name captures our essence:

- Agile: A reflection of our relentless focus on adaptability, speed, and evolution — the pillars of modern professional excellence.
- Fever: The intense energy and passion that drives our learners, trainers, and partners to stay ahead in a fast-moving tech landscape.
- Together, AgileFever represents a burning commitment to real-world, agile learning that powers future-ready careers.

We focus on three core pillars:

Certification Programs: Co-delivered with global certifying bodies like Microsoft, Scaled Agile, and Kanban University, ensuring credibility and global recognition.

Industry-Led Bootcamps: Designed in collaboration with top-tier practitioners and academic leaders, our bootcamps offer project-based learning aligned with real job roles.

Career Acceleration & Interview Prep: Including personalized coaching, mock interviews, and portfolio development to help learners land high-impact roles across industries.

Our Expertise - From Artificial Intelligence, Agentic AI, and Generative AI to Cloud, Cybersecurity, Project Management, and Agile methodologies, AgileFever offers a catalog of 200+ cutting-edge courses — all taught 100% live, supported by mentors, capstones, and real-world use cases.

Whether you're a corporate team looking to upskill at scale, or a new graduate preparing for your first role, our programs are built to deliver industry-readiness from Day 1.

Our Impact - With over 25,000 professionals trained and 1,000+ enterprise teams empowered, AgileFever is not just another EdTech company — we are a strategic capability partner to some of the world's most ambitious individuals and organizations.

Authorized Training Partner



AgileFever Advantages

✓ **World-Class Faculty & Mentors**

Learn from top university professors (Caltech, Michigan State, IITs, UT Dallas) and seasoned FAANG professionals.

✓ **Industry-Backed, Job-Ready Curriculum**

Curriculum designed by experts from leading companies, focused on real-world applications, not just theory.

✓ **Fully Live, Instructor-Led Training**

Engage in 100% live sessions with instant doubt resolution and real-time interaction-no pre-recorded content.

✓ **Hands-On Learning With Projects & Labs**

Work on 10+ projects and multiple labs to build practical, job-ready skills.

✓ **Exclusive Lifetime Access**

Get lifetime access to updated course content, so your skills stay relevant long after training ends.

✓ **Private Peer Learning Community**

Join an exclusive network for collaboration, discussions, and professional growth.

✓ **Affordable Premium Education**

Gain top-tier training and mentorship at highly competitive pricing.

✓ **Mentorship From Industry Leaders**

Get personalized guidance from experts at Fortune 500 companies and fast-growing startups.

✓ **Career Coaching & Soft Skills Development**

- Personalized career coaching from certified professionals to align your goals with industry expectations
- Behavioral coaching to help you excel in HR and cultural fit interviews
- Multiple weekly office hours for ongoing support, doubt resolution, and expert guidance

✓ **Job Market Readiness & Visibility**

- Resume refinement with direct input from top recruiters to craft a standout profile
- Mock interviews conducted by real hiring managers to build interview confidence and readiness
- LinkedIn profile optimization to boost visibility and attract top opportunities



Certificates

Upon successful completion of the Agentic AI BootCamp, you will receive a Certificate of Completion from AgileFever. Additionally, you will be awarded certificates for all applicable modules within the program, recognizing your dedication, initiative, and commitment to advancing your expertise in AI. These certificates serve as a testament to your skills and growth as an AI professional.



Program Outcomes

After completing this course, learners will be able to:

- ✓ Build intelligent AI agents from scratch using Python.
- ✓ Understand the full agent architecture and roles of each part.
- ✓ Choose and use frameworks like AutoGen and CrewAI to accelerate development.
- ✓ Using tools to fetch the data from the Internet and build some use cases.
- ✓ Create agents with persistent vector memory.
- ✓ Develop agents that dynamically adapt plans and tool usage.
- ✓ Design multi-agent systems with defined roles.
- ✓ Deploy scalable and maintainable agent applications.
- ✓ Implement safety constraints and perform ethical checks.
- ✓ Design agent SaaS applications for real-world use cases.
- ✓ Deliver a functional multi-agent system ready for practical application.

Learning Path



Program Curriculum

Module 1

Python, Numpy and Basics (Optional Pre-requisite)

■ Topics:

- Python syntax and control structures
- Working with NumPy for data manipulation
- Understanding functions, loops, and data structures
- Reading and writing files, JSON handling

■ Learning Objectives:

- Provide foundational Python and NumPy skills for Agentic AI

■ Learning Outcomes:

- Able to write agent-related code with essential Python knowledge.

■ Use Cases/Projects:

- Data parsing scripts, function chaining demos.

■ Assessment Methods:

- Hands-on coding quiz and mini project.

Module 2

Agentic AI Foundations

■ **STopics:**

- What is an AI Agent?
- LLM as reasoning engines
- Planner, Executor, Tools, and Memory

■ **Learning Objectives:**

- Introduce the concept and components of AI agents.

■ **Learning Outcomes:**

- Understand the agent architecture and roles of each part.

■ **Use Cases/Projects:**

- Create a rule-based planning agent with memory.

■ **Assessment Methods:**

- Short quiz + code implementation.

Module 3

Agent Architectures

■ Topics:

- What is an AI Agent?
- LLM as reasoning engines
- Planner, Executor, Tools, and Memory

■ Learning Objectives:

- Introduce the concept and components of AI agents.

■ Learning Outcomes:

- Understand the agent architecture and roles of each part.

■ Use Cases/Projects:

- Create a rule-based planning agent with memory.

■ Assessment Methods:

- Short quiz + code implementation.

Module 4

Agent Frameworks

■ Topics:

- Crew AI framework, Autogen Framework , LangGraph Framework

■ Learning Objectives

- Learn about different Frameworks

■ Learning Outcomes

- Able to create use cases on different framework

Module 5

Prompt Engineering

■ Topics:

- Structure of a prompt , Advance prompting technique like COT , TOT

■ Learning Objectives:

- Should be able to understand about how to write prompts for generating desired output from LLM

Module 6

Tool Use & Plugins

■ Topics:

- API calling and browser tools
- File system interaction (read/write, parse)
- Function calling with OpenAI, Claude

■ Learning Objectives:

- Enable agents to interact with external tools and services.

■ Learning Outcomes:

- Agents can fetch, read, write, and manipulate data.

■ Use Cases/Projects:

- Build an agent that queries web APIs and updates documents.

■ Assessment Methods:

- Code demo and test scenarios.

Module 7

Memory in Agents

■ Topics:

- Short-term vs long-term memory
- Vector memory with FAISS, Pinecone
- LangGraph & memory persistence

■ Learning Objectives:

- Implement agent memory for enhanced context.

■ Learning Outcomes:

- Create agents with persistent vector memory.

■ Use Cases/Projects:

- Create a chatbot with persistent user memory.

■ Assessment Methods:

- Functionality demonstration with memory storage.

Module 8

Planning and Reasoning

■ Topics:

- Multi-step planning with ReAct
- Dynamic tool chaining
- Decision making under constraints

■ Learning Objectives:

- Enable agents to reason and plan across multiple steps.

■ Learning Outcomes:

- Agents can dynamically adapt plans and tool usage.

■ Use Cases/Projects:

- Build a goal-seeking assistant with dynamic steps.

■ Assessment Methods:

- Step-by-step task execution assessment.

Module 9

Multi-Agent Collaboration

■ Topics:

- CrewAI, AutoGen, CAMEL frameworks
- Message-passing and negotiation
- Role-based agent orchestration

■ Learning Objectives:

- Introduce agents that collaborate and negotiate.

■ Learning Outcomes:

- Design multi-agent systems with defined roles.

■ Use Cases/Projects:

- Create buyer-seller agents that simulate transactions.

■ Assessment Method

- Group demo with inter-agent communication.

Module 10

Agent Deployment & Infrastructure

■ Topics:

- Dockerizing and deploying agents
- LLMOps for Agents
- Cloud infra (AWS Lambda, GCP, HuggingFace Spaces)

■ Learning Objectives:

- Deploy agents in production-ready infrastructure.

■ Learning Outcomes:

- Deploy scalable and maintainable agent applications.

■ Use Cases/Projects:

- Deploy a LangGraph agent on HF Spaces with Docker.

■ Assessment Methods:

- Deployment report and live link submission.

Module 11

Security, Alignment & Safety

■ Topics:

- Loop prevention and constraint design
- Goal alignment and ethical agents
- Trust boundaries and permission control

■ Learning Objectives:

- Ensure safe, ethical, and aligned agent behaviors.

■ Learning Outcomes:

- Able to implement safety constraints and ethical checks.

■ Use Cases/Projects:

- Implement constraints in a goal-chasing agent.

■ Assessment Method:

- Checklist-based review + discussion.

Module 12

Agent-as-a-Service (Agent SaaS)

■ Topics:

- Creating monetizable agent products
- Use case templates (travel planner, sales bot)
- Scheduling, persistent jobs, dashboards

■ Learning Objectives:

- Productize agents and offer as commercial services.

■ Learning Outcomes:

- Design agent SaaS apps for real-world use cases.

■ Use Cases/Projects:

- Build and price a travel planning SaaS agent.

■ Assessment Methods:

- Business model presentation + prototype demo.

Module 13

Agent Communication and Collaboration Protocols: MCP, A2A, and ACP

■ Topics:

- Introduction to MCP (Multi-Agent Communication Protocols)
- Understanding A2A (Agent-to-Agent) Protocol
- Deep Dive into ACP (Agent Collaboration Protocol)
- Comparing MCP vs A2A vs ACP
- When and how to apply each protocol in realworld agent systems

■ Learning Objectives:

- Understand the core principles and differences between MCP, A2A, and ACP protocols.
- Learn when and how to apply each protocol in real-world multi-agent systems.
- Gain practical exposure to implementing these protocols using frameworks like AutoGen and CrewAI.

■ Learning Outcomes:

- Ability to design and implement agent communication using MCP, A2A, and ACP.
- Confidently choose the right protocol based on system requirements and agent behavior.
- Deliver functional multi-agent workflows with appropriate communication and collaboration logic.

Module 14

Capstone Project

■ Topics:

- Build a multi-agent system with memory, tools, reasoning
- Use CrewAI or LangGraph orchestration
- Real-world example: Autonomous CRM assistant

■ Learning Objectives:

- Demonstrate integrated agentic skills through a real-world project.

■ Learning Outcomes:

- Deliver a functional multi-agent system for practical application.

■ Use Cases/Projects:

- **Use Case 1:** Go-to-Market Strategy for a New Energy Drink using Agentic AI
- **Objective:** To effectively position and launch a new energy drink in a competitive market by leveraging autonomous agents for market intelligence and strategic planning.
- **Use Case 2:** Multi-Agents AI for Product Launch Strategy
- **Objective:** A beverage company is preparing to launch a new energy drink. Success depends on understanding market trends, identifying consumer preferences, and creating a compelling product positioning strategy.

■ Assessment Methods:

- Peer-reviewed capstone submission and demo.

Tools Covered

Gain hands-on experience with leading tools:



Projects

Build your portfolio with practical, end-to-end projects:

- ✓ **Python Mini Project:** Function chaining and data parsing
- ✓ **Rule-Based Planning Agent:** With memory integration
- ✓ **CrewAI/LangGraph Pipeline:** Build an agent pipeline
- ✓ **API-Driven Agents:** Query APIs, update documents
- ✓ **Chatbot with Memory:** Persistent user context with vector storage
- ✓ **Goal-Seeking Assistant:** Dynamic planning and tool chaining
- ✓ **Multi-Agent Simulation:** Buyer-seller transaction using message passing
- ✓ **Cloud-Deployed Agent:** Dockerized deployment to HuggingFace Spaces
- ✓ **Goal-Chasing Agent with Safety Checks:** Ethical agent design
- ✓ **Agent-as-a-Service (SaaS):** Travel planner or sales bot with pricing models
- ✓ **Capstone Project:**
 - Use Case 1:** Go-to-Market Strategy for a New Energy Drink using Agentic AI
 - Objective:** To effectively position and launch a new energy drink in a competitive market by leveraging autonomous agents for market intelligence and strategic planning.
 - (or)
 - Use Case 2:** Multi-Agents AI for Product Launch Strategy
 - Objective:** A beverage company is preparing to launch a new energy drink. Success depends on understanding market trends, identifying consumer preferences, and creating a compelling product positioning strategy.

Certification Process

Candidates can register and complete to this program in 4 simple steps:



Pre-requisites:

There is no need of any prior prerequisites.

Exam Details

There is no formal exam for this bootcamp.



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