[Agent Architectures in AI](https://www.geeksforgeeks.org/agent-architectures-in-ai/)

[Pinecone](https://app.pinecone.io/organizations/-ODEbySq_xoeEiZ5Iwih/projects/de82e7e9-4da9-4e0d-ab81-2740e5e5f668/get-started/developer-quickstart)

[A Quick Review of The Most Popular AI Agent Frameworks ..](https://medium.com/@ceo_44783/a-quick-review-of-the-most-popular-ai-agent-frameworks-june-2024-ce53c0ef809a)

* **Autogen-**<https://github.com/microsoft/autogen>-
* **Semantic Kernel -** <https://github.com/microsoft/semantic-kernel>
* **Promptflow-** <https://github.com/microsoft/promptflow>
* **Langchain-** <https://github.com/langchain-ai/langchain>
* **CrewAI -** <https://github.com/joaomdmoura/crewAI>
* **Bonus: MemGPT-** <https://github.com/cpacker/MemGPT>

[AutoGen Studio 2.0](https://autogen-studio.com/)

[AI Agent Frameworks: Components & Top 5 Open-Source Solutions](https://www.acorn.io/resources/learning-center/ai-agent-frameworks/#:~:text=AI%20agent%20frameworks%20are%20designed,that%20grow%20alongside%20their%20needs.)

[Agents in Artificial Intelligence](https://www.geeksforgeeks.org/agents-artificial-intelligence/)

[What Are AI Agents?](https://www.ibm.com/think/topics/ai-agents)

[What are AI Agents? - Artificial Intelligence](https://aws.amazon.com/what-is/ai-agents/)

[What Are AI Agents? Benefits, Examples, Types](https://www.salesforce.com/agentforce/what-are-ai-agents/)

[How to Build an AI Agent: 7 Main Steps | Uptech](https://www.uptech.team/blog/how-to-build-an-ai-agent)

[How to Build an AI Agent](https://www.salesforce.com/in/agentforce/build-ai-agent/)

[Comprehensive Guide to Build AI Agents from Scratch](https://www.analyticsvidhya.com/blog/2024/07/build-ai-agents-from-scratch/)

[State of AI Agents](https://www.langchain.com/stateofaiagents)

[How to Build an LLM from Scratch: A Step-by-Step Guide](https://blog.spheron.network/how-to-build-an-llm-from-scratch-a-step-by-step-guide)

[AI Agents Vs. AI Pipelines](https://www.geeksforgeeks.org/ai-agents-vs-ai-pipelines/?ref=ml_lbp)

[Emerging Architectures for LLM Applications](https://a16z.com/emerging-architectures-for-llm-applications/)

[Stanford](https://crfm.stanford.edu/helm/lite/latest/)

[Hugging Face](https://huggingface.co/spaces/HuggingFaceH4/open_llm_leaderboard)

[Prompt Engineering Guide](https://www.promptingguide.ai/techniques)

An AI agent is a software program that can perform tasks autonomously to meet goals set by humans:

* **How they work**

AI agents use machine learning and natural language processing (NLP) to understand and respond to user inputs. They can:

* + Collect data
  + Set goals
  + Gather information
  + Plan steps to achieve goals
  + Use logic to make decisions
  + Learn from trial and error
  + Use tools to achieve goals
* **What they can do**

AI agents can perform a wide range of tasks, including:

* + Answering questions
  + Resolving issues
  + Multi-tasking
  + Decision-making
  + Problem-solving
  + Interacting with external environments
* **Where they can be used**

AI agents can be used in various applications, such as:

* + Software design
  + IT automation
  + Code-generation tools
  + Conversational assistants
  + Customer service
  + Sales
  + Supply chain
* **Examples of AI agents**
  + **Alexa**: Amazon plans to expand Alexa's capabilities so it can perform tasks independently
  + **Agentforce**: Salesforce's AI agents can craft conversational responses based on business data
  + **AutoGPT**: A proof-of-concept that demonstrates an AI agent that can answer questions about a product on Reddit