NebulaByte: Introduction to AI Agents

NebulaByte AI Agents Guide

What are AI Agents?

AI agents are autonomous systems capable of perceiving their environment and taking actions to achieve specific goals. Unlike traditional software, AI agents can:

- Learn from experience
- Adapt to new situations
- Make decisions based on context
- Interact with users naturally

Key Components:

1. Perception: Gathering information from the environment
2. Reasoning: Processing information to make decisions
3. Action: Executing tasks based on decisions
4. Learning: Improving performance over time

Types of AI Agents:

- Reactive Agents: Respond to immediate stimuli
- Deliberative Agents: Plan actions based on goals
- Hybrid Agents: Combine reactive and deliberative approaches
- Multi-Agent Systems: Multiple agents working together

Applications:

AI agents are used in customer service, autonomous vehicles, game playing, personal assistants, and industrial automation. They represent the future of intelligent automation.