

Types of Al Agents

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Agenda

Understanding AI agent types and their architectures

- Overview of different agent types
- How agent types map to different use cases



Introduction to Agent Types

- Al Agents are designed for different tasks.
- Some agents follow rules, while others learn and adapt.
- Understanding these types helps in designing the right Al solutions.





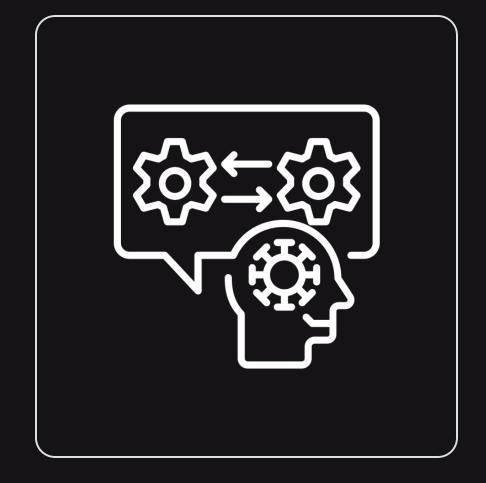






Reactive Agents

- Agents that respond directly to current inputs, without planning
- Usually no memory, only react to current inputs.
- Example: Simple chatbots with rule-based replies





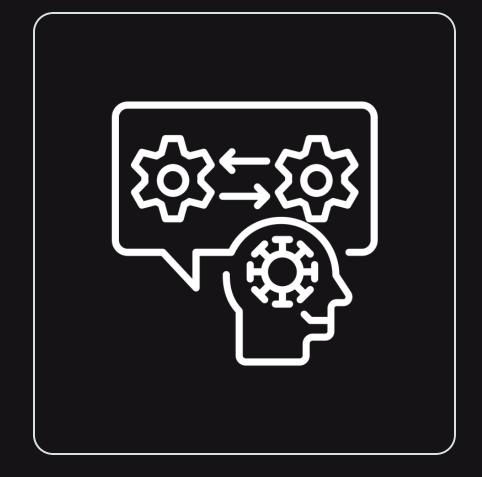
Reactive Agents

Advantages

- Fast response
- Simpler design

Limitations

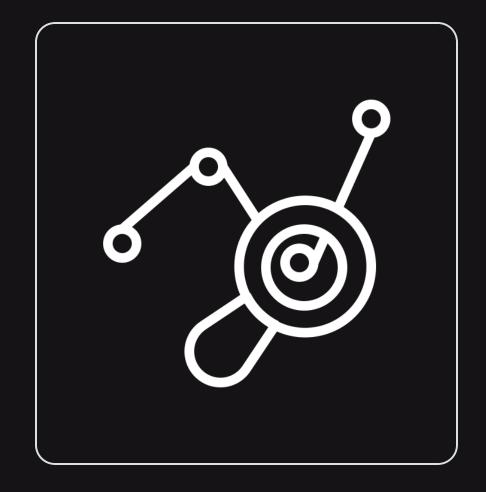
 Cannot learn or adapt over time





Deliberative Agents

- Agents that maintain internal models/goals, plan ahead and reason to make decisions
- Example: Goal-oriented systems that schedule tasks or anticipate user needs





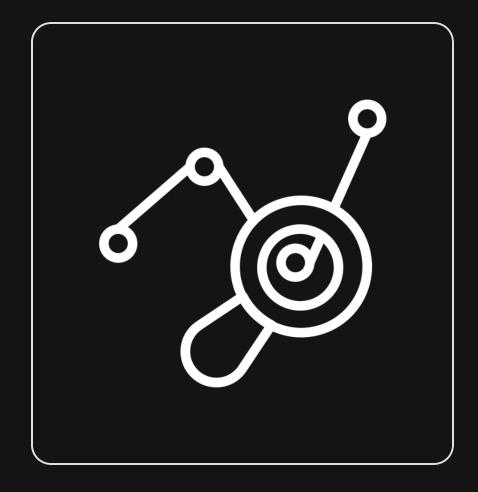
Deliberative Agents

Advantages

 Handles complex decision-making

Limitations

- Computationally expensive
- Complex





Learning Agents

- Agents that improve over time using feedback and machine learning
- Example: Al recommendation systems like Netflix





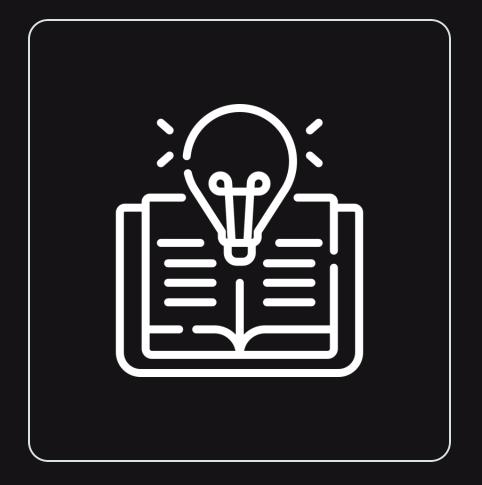
Learning Agents

Advantages

Adaptive and scalable

Limitations

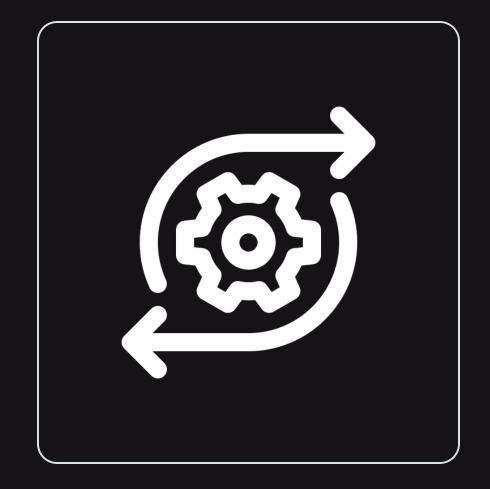
Requires large amounts of training data





Hybrid Agents

- Combine multiple types of Al agents for better performance
- Example: Customer support Agent that uses a chatbot (reactive) and learns from interactions (learning agent)





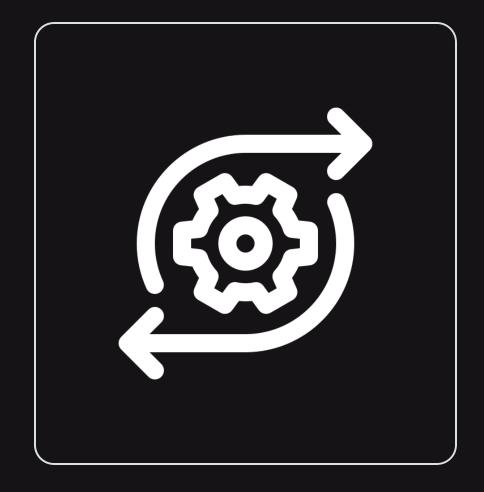
Hybrid Agents

Advantages

Robust and flexible

Limitations

- Complex to implement
- Expensive in production



Thanks