ARCHITECTURES OF ARTIFICIAL INTELLIGENCE

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SYMBOLIC AI ARCHITECTURE:

- Based on symbols and rules.
- Utilizes knowledge representation and reasoning to solve problems.
- Common in expert systems.

Connectionist AI Architecture:

- Utilizes neural networks to simulate human brain processes.
- Includes feedforward, recurrent, and convolutional neural networks.

Hybrid AI Architecture:

- Combines symbolic and connectionist approaches to leverage the strengths of both.
- Used in various AI applications.

Modular AI Architecture:

- Breaks AI systems into modules or components with specific functionalities.
- Promotes modularity and ease of integration

Multi-Agent Systems (MAS):

- Involves multiple autonomous agents that collaborate to achieve goals.
- Used in simulations, games, and distributed problem-solving.

Distributed AI Architecture:

- AI systems are distributed across multiple interconnected components.
- Enhances scalability and fault tolerance.

Cognitive Architecture:

- Aims to mimic human cognitive processes.
- Includes models like ACT-R (Adaptive Control of Thought - Rational) and Soar.

Natural Language Processing (NLP) Architectures:

- Specialized architectures for processing and understanding human language.
- Includes models like BERT, GPT, and LSTM-based architectures.

THANK YOU