SNS COLLEGE OF ENGINEERING
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Artificial Intelligence & Natural Language Processing

Types of Intelligence in AI

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Intelligence?

Intelligence is the ability to acquire, understand, and apply knowledge to solve problems, adapt to new situations, and make decisions. It involves reasoning, learning, perception, and problem-solving.In Artificial Intelligence (AI), intelligence refers to the simulation of human-like cognitive abilities by machines to perform tasks such as learning, reasoning, and self-correction.

Types of AI Intelligence

Narrow AI

•Also known as weak AI, this type of AI is designed to perform a specific task, such as facial recognition, driving a car, or internet searches.

•Most current AI systems, including those that play games like chess and Go, are narrow AI.

Artificial general intelligence (AGI)

•Also known as strong AI, this type of AI aims to perform intellectual tasks in the same way as a human.

•AGI aims to learn and adapt to new situations, rather than being limited to a single task or area.

Key points about programming without AI:

Superintelligent AI

•This type of AI surpasses human intelligence in all aspects, including creativity, problem-solving, and general wisdom.

Reactive machines

•This is the most basic type of AI.

•Reactive machines are task-specific and have no memory, so they always respond to the same input.

•Machine learning models are often reactive machines.

Self-aware AI

•This is a speculative vision of AI where machines would have consciousness and self-awareness.

Limited memory AI

•This type of AI uses past data to make predictions. It builds a short-term knowledge base and performs tasks based on that knowledge.

Relevant AI techniques used in programming with AI:

Theory of Mind

- AI that understands human emotions, intentions, and social interactions. Still under research.

Symbolic AI

- Uses rules and logic to process information.

Connectionist AI

- Mimics the neural networks of the human brain (Deep Learning).

Evolutionary AI

- Uses genetic algorithms and survival-based approaches for problem-solving.

AI intelligence varies from **basic rule-based systems to advanced self-learning models**. While **Narrow AI** is widely used today, researchers are working towards **General AI** and **Super AI** to achieve human-like capabilities.


thank
you