

Introduction to Artificial Intelligence

Artificial Intelligence (AI) is the field of computer science that focuses on creating machines capable of performing tasks that typically require human intelligence.

Types of AI

1.

Narrow AI

Designed for specific tasks such as voice assistants and recommendation systems.

2.

3.

General AI

A theoretical form of AI that can perform any intellectual task that a human can do.

4.

5.

Super AI

Hypothetical AI that surpasses human intelligence.

6.

Machine Learning

Machine Learning (ML) is a subset of AI that allows machines to learn from data without being explicitly programmed.

Types of Machine Learning:

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Supervised Learning

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Unsupervised Learning

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Reinforcement Learning

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Deep Learning

Deep Learning is a subset of Machine Learning that uses neural networks with many layers.

Examples:

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Image recognition

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Speech recognition

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Natural language processing

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What is RAG in AI?

RAG stands for Retrieval Augmented Generation.

It is a technique where:

- 1.

Relevant documents are retrieved from a database.

2.

3.

The retrieved information is given to a language model.

4.

5.

The model generates answers using both its knowledge and the retrieved context.

6.

RAG helps reduce hallucinations and improves factual accuracy.