

# 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.

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## 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.