

# MACHINE LEARNING

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# Agenda

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1. What is Machine Learning?
2. Types of Machine Learning
3. Deep Learning
4. Machine Learning Applications
5. Challenges in Machine Learning



# What is Machine Learning?

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- Machine Learning is an application of Artificial Intelligence.
- It focuses on developing methods for computers to learn and improve their performance.
- Machine Learning is used to solve complex problems, which are difficult for a human.

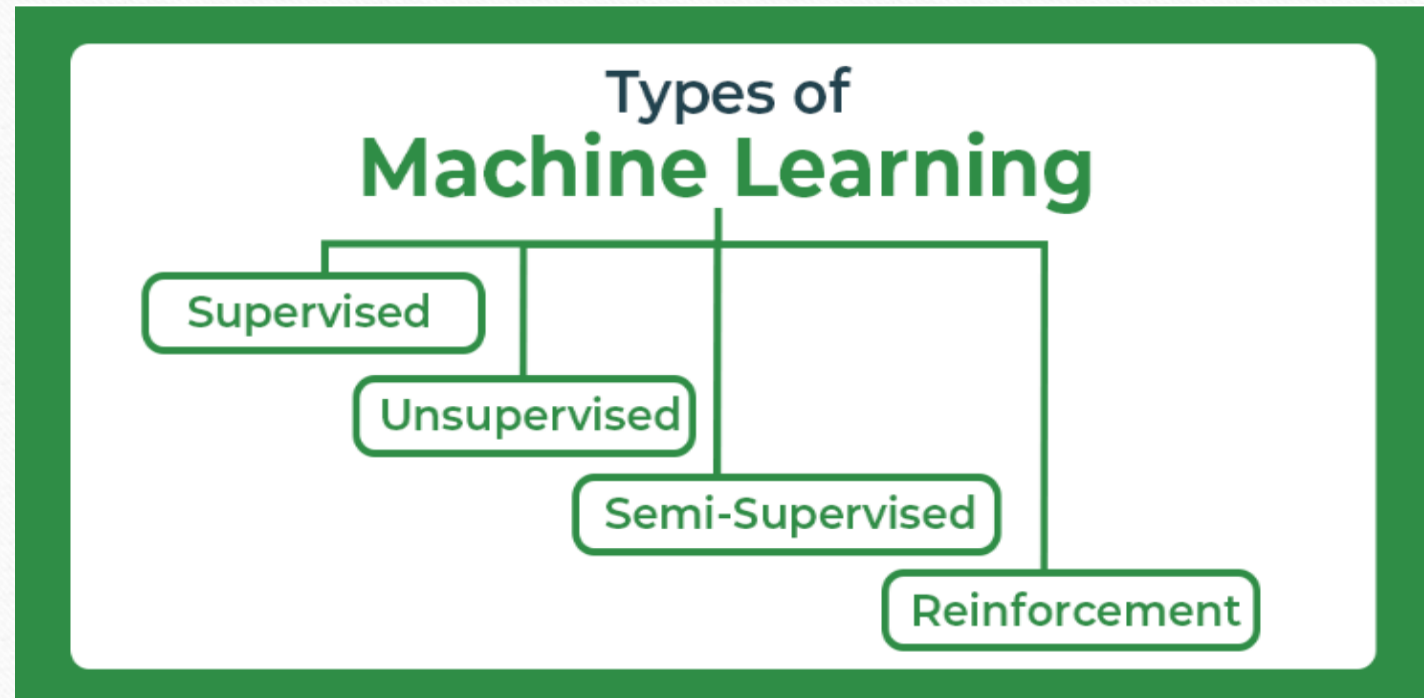
# MACHINE LEARNING

●●●● LIFE CYCLE ●●●●



# Types of Machine Learning

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# Deep Learning

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- **In deep learning**, a computer model learns to perform classification tasks directly from images, text, or sound.
- It is based on artificial neural networks.
- It is capable of learning complex patterns and relationships within data



Artificial Intelligence

Machine Learning

Deep  
Learning

# Machine Learning Applications

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Real-world applications of machine learning:

- Healthcare
- Finance
- Autonomous vehicles
- Recommender systems
- Natural language processing



# Challenges in Machine Learning

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- Not enough training data.
- Poor Quality of data.
- Irrelevant features.
- Nonrepresentative training data.
- Overfitting and Underfitting.

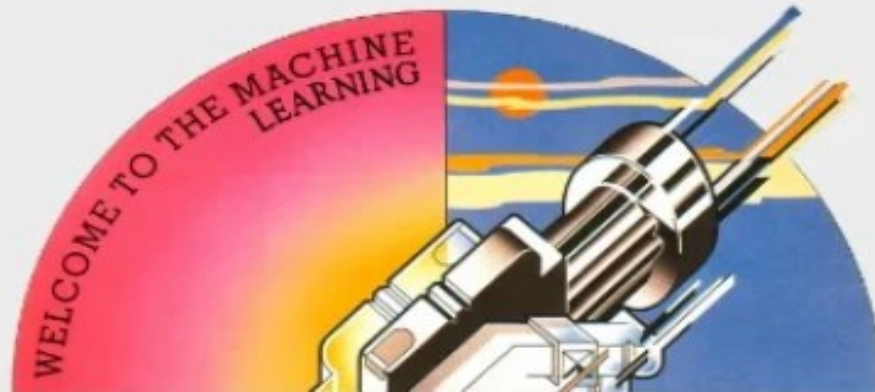


**Conclusion:**

**Machine Learning is totes powerful...**

**a bit complicated...**

**and often requires training and patience.**





*Karan*