

Introduction to Machine Learning and Data Science

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What is Machine Learning?

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- It's about creating models that can generalize patterns from data.

Machine Learning as a School

Metaphor: A School for Machines

- Imagine building a school for machines.
- Our goal: Teach machines to learn and make decisions autonomously.
- Similar to how children come to school, machines learn from data.
- After training, machines leave with knowledge and competences.

Key Components of the "School"

- **Students (Machines):** Our machines are the students of the school.
- **Teachers (Data):** The data serves as the teachers, providing information for the machines to learn.
- **Curriculum (Algorithms):** Algorithms act as the curriculum, guiding the learning process.
- **Graduation (Model Deployment):** Once trained, machines graduate and are ready to apply their knowledge in real-world scenarios.

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- Automation of complex tasks.
- Handling large and diverse datasets.
- Making predictions and decisions in real-time.

Examples of Machine Learning Applications

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- & many more...

Difference between AI, ML, and DL

DEFINITIONS AND DIFFERENCES

MENTALSTACK

