

# Understanding Artificial Intelligence

## Chapter 1: What is artificial intelligence?

- **Video:** What is Artificial Intelligence
  - Learning Objective: Define the concept of Artificial Intelligence as an umbrella discipline and differentiate it from related concepts such as Artificial General Intelligence and computer science.
- **Video:** What can AI do?
  - Learning Objective: Analyze real-world problems to determine whether they can be addressed by AI, considering its capabilities and current limitations.
- **Video:** Areas and related Disciplines of AI
  - Learning Objective: Identify the main subfields of AI (e.g., Machine Learning, Deep Learning, Robotics) and explain how they relate to adjacent disciplines.

## Chapter 2: Tasks AI Can solve

- **Video:** Algorithms and AI systems demystified
  - Learning Objective: Recognize how algorithms and AI systems function at a conceptual level without technical detail.
- **Video:** Acquiring data
  - Learning Objective: Identify ways AI systems get data, namely by sensing the environment or collecting datasets
- **Video:** Learning from data
  - Learning Objective: Distinguish between types of machine learning applicable to different tasks
- **Video:** Interacting with the environment
  - Learning Objective: Recognize how AI systems interact with the environment using robotics, computer vision, and natural language processing.

## Chapter 3: Harnessing AI in organizations

- **Video:** Establishing an AI culture
  - Learning Objective: Identify the key points, roadmap and challenges to build an AI-driven organization.
- **Video:** Data Strategy, resources and people
  - Learning Objective: Recognize the importance and identify core elements in data strategy, resources and people to establish an AI culture
- **Video:** Is your deployed AI system successful?
  - Learning Objective: Identify how to assess the success of an AI solution from a business perspective and identify who is responsible.
- **Video:** Challenges and success stories
  - Learning Objective: Identify challenges organizations face in adopting AI, and identify best practices in organizations that faced them and successfully became AI-driven.

## Chapter 4: The human side of AI

- **Video:** Democratizing Artificial Intelligence
  - Learning Objective: Recognize the concept of AI democratization in society and why it matters.
- **Video:** Explainability and interpretability
  - Learning Objective: Identify tools and methods for building transparent AI systems whose decisions are interpretable.
- **Video:** Social challenges: ethics, fairness and privacy
  - Learning Objective: Recognize bias and data privacy as two challenges to make AI systems that behave fairly in society.
- **Video:** Biased or unbiased behavior?
  - Learning Objective: Evaluate the potential impact AI will have in our world in the next years, such as in the workforce or economy.