

# Introduction to Artificial Intelligence

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#### Lecture 1: Intro to AI

**Definition 1. Artificial Intelligence** is the science of making machines that think like people, think rationally, act like people, and act rationally.

**Definition 2. Machine Learning** is a subfield of AI, where statistical approaches are used. It is also a subfield of Data Science, which has other fields such as visualization and statistics.

#### Lecture 2: Intro to AI and Agents

### 1 Agents and Environments

**Definition 3.** An **agent** is an entity that perceives and acts.

**Definition 4.** A **rational agent** selects actions that maximize its utility.

**Definition 5.** Characteristics of the **percepts environment**, and **action space** dictate techniques for selecting actions.