

Write Three Definitions - “Machine Learning”

Criteria of the Assignment

- Reading Situation
- Parenthetical definition
- Sentence definition
- Expanded definition

Objectives of the Assignment

- Apply the importance and role of definitions in technical writing from the textbook to a reading situation
- Understand how audience and purpose indicate the need for definition
- Distinguish the following levels of details in definition: Parenthetical, Sentence, Expanded
- Provide sufficient detail to the reading situation

Reading situation

A science student is explaining to their friend about “Machine Learning” as a form of studying for an upcoming midterm. The science student is taking a degree in computer science. The friend is an art student taking a degree in film production.

Parenthetical definition

Machine Learning (a type of artificial intelligence) requires historical data.

Sentence definition

Term	Class	Distinguish Feature
Machine Learning	Branch of AI (Artificial Intelligence)	Machine learns from past data without explicit programming

Machine Learning is a type of Artificial Intelligence that predicts or classifies new information based on a large volume of historical data. It can provide a meaningful result based on probability or statistics.

Expanded definition

Machine Learning (ML) is a type of Artificial Intelligence (AI) that uses data and algorithms to imitate how humans learn, gradually improving its accuracy. It trains a model from input data (ex. Description of dog) and the data's corresponding targets (ex. Type of dog) to predict targets for new data. ML and AI are not the same terms to be used interchangeably. AI is a broad concept of machines able to do tasks that humans consider "smart" while machine learning is an application of AI with humans giving machines access to data to let it learn for itself¹. The term "machine learning" came from a logician, Walter Pitts, and a neuroscientist, Warren McCulloch. Their 1943 paper attempted to mathematically visualize thought processes and decision-making in humans². Their mathematical modelling of the nervous system's network was called "machine learning."

Machine Learning collected, edited, and visualized the data. The data is split to train and test data. The training data is used to build a model while the test data is used to evaluate the model³. When the model is satisfactory, it is used on unseen data. Examples of using Machine Learning include social media features and product recommendations. Facebook takes note of a user's activities, chats, likes, comments, and the time spent on specific kinds of posts. From that data, machine learning learns from the user's behaviours to make friends and page suggestions for the user's profile. Similarly, Amazon tracks a user's behaviour based on their previous purchases, searching patterns, and cart history to make product recommendations shown in Figure 1.

¹ Marr, Bernard. "What Is the Difference Between Artificial Intelligence and Machine Learning?" Forbes, Forbes Magazine, 10 Dec. 2021,

² Chai, Wesley. "A Timeline of Machine Learning History." WhatIs.com, TechTarget, 20 Oct. 2020, <https://www.techtarget.com/whatis/A-Timeline-of-Machine-Learning-History>.

³ "Welcome to the Machine Learning Toolkit." Welcome to the Machine Learning Toolkit - Splunk Documentation, <https://docs.splunk.com/Documentation/MLEApp/5.3.1/User/WelcometoMLTK>.

Amazon.com has new recommendations for you based on [items](#) you purchased or told us you own.



[The Little Big Things: 163 Ways to Pursue EXCELLENCE](#)



[Fascinate: Your 7 Triggers to Persuasion and Captivation](#)



[Sherlock Holmes \[Blu-ray\]](#)



[Alice in Wonderland \[Blu-ray\]](#)

Figure 1. A screenshot of recommendations made by Amazon based on the user's history of items purchased.