

ML 229 - Introduction to Machine Learning

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What is Machine Learning?

Machine learning is a field which grew out of the AI dream: the goal of one day having computers think for themselves. It touches a wide variety of industries – spam filters, predictive searching, facial identification, data mining, natural language processing... – and is based on the application of learning algorithms taking input data, and determining the proper response. The most accurate definition of a machine learning problem is to say that a machine learning problem is any one where for some task T performed with experience E and measured by metric M , M improves as E .

There are two main categories of machine learning algorithms: **supervised learning** and **unsupervised learning**. There also exist less widely-used algorithms such as **reinforcement learning** and **recommender systems**.