Course

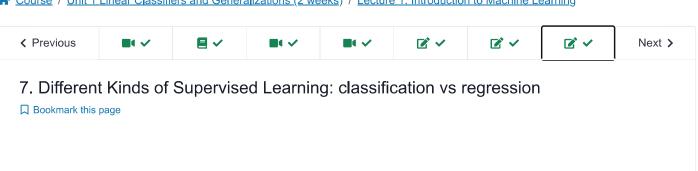
Progress

<u>Dates</u>

Discussion

Resources

☆ Course / Unit 1 Linear Classifiers and Generalizations (2 weeks) / Lecture 1. Introduction to Machine Learning



classification vs regression



Video

Download video file

Transcripts

<u>Download SubRip (.srt) file</u>

<u>Download Text (.txt) file</u>

where you have specified the correct

behavior.

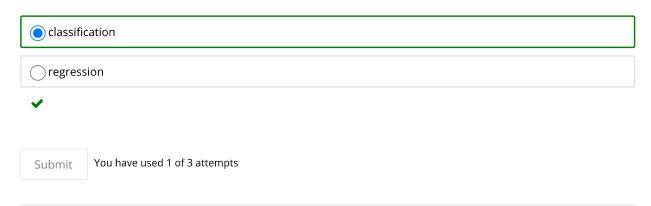
Classification maps **feature vectors** to **categories**. The number of categories need not be two - they can be as many as needed. **Regression** maps feature vectors to **real numbers**. There are other kinds of supervised learning as well

For a more thorough statistical background on classification and regression, please check out the following links. <u>Classification Regression</u>

Classification or Regression? 1

1/1 point (graded)

Question 1: We want to come up with a classifier that classifies each news article into one of the following categories: politics, sports, entertainment. Is this a classification problem or a regression problem?



Classification or Regression? 2

1/1 point (graded)

Question 2: We want to estimate the price of bitcoin after 30 days. Is this a classification problem or a regression problem?

Classification
regression
✓
Submit You have used 1 of 3 attempts
Different Types of Learning
1.0/1.0 point (graded) Choose the type of learning that best corresponds to each of the following statements.
1)Labelled training and test examples
supervised learning
unsupervised learning
semi-supervised learning
active learning
○ transfer learning
reinforcement learning
•
2)Using knowledge from one task to solve another task
supervised learning
unsupervised learning
semi-supervised learning
active learning
• transfer learning
reinforcement learning
•
3)Learning to navigate a robot
supervised learning
unsupervised learning
semi-supervised learning
active learning

<u> </u>	
transfer learning	
reinforcement learning	
✓	
4)Deciding which examples are needed to learn	
supervised learning	
unsupervised learning	
semi-supervised learning	
active learning	
transfer learning	
reinforcement learning	
✓	
5)Data with no annotation	
supervised learning	
ounsupervised learning	
semi-supervised learning	
active learning	
transfer learning	
reinforcement learning	
✓	
6)Training and test examples with limited annotation	
supervised learning	
unsupervised learning	
semi-supervised learning	
active learning	
transfer learning	
reinforcement learning	