

Supervised learning I

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This paper said that supervised learning , whether deep or not , is the most common form of machine learning .1 This means they build a system that can classify images as containing . The professors first collect a large data set of images of homes , cars , people and pets , each labelled with its category before training .

The process is complex , because they want to have the highest score of all acategories , but this is impossible . They compute an objective function that measures the error (or distance) between the output scores and the desired pattern of scores. [1] The machine then modifies the internal adjustable pattern called weight .

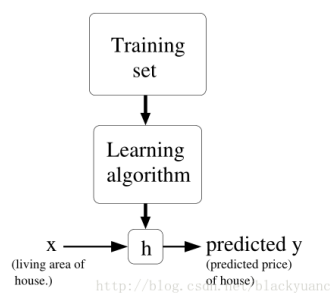


Figure 1: Supervised learning

The main question is , how to properly adjust the weight vector for each weight which indicates by what amount the error would increase or decrease if the weight were increased by a tiny amount. I will continue learning .

1	Latex1
2	Latex2

Table 1: Classification of machine learning

References

- [1] Geoffrey Hinton Yann LeCun, Yoshua Bengio. Deep learning. *Nature*, 521(28):9, 28 5 2015.