

Stanford  
ONLINE

DeepLearning.AI



# Machine Learning Overview

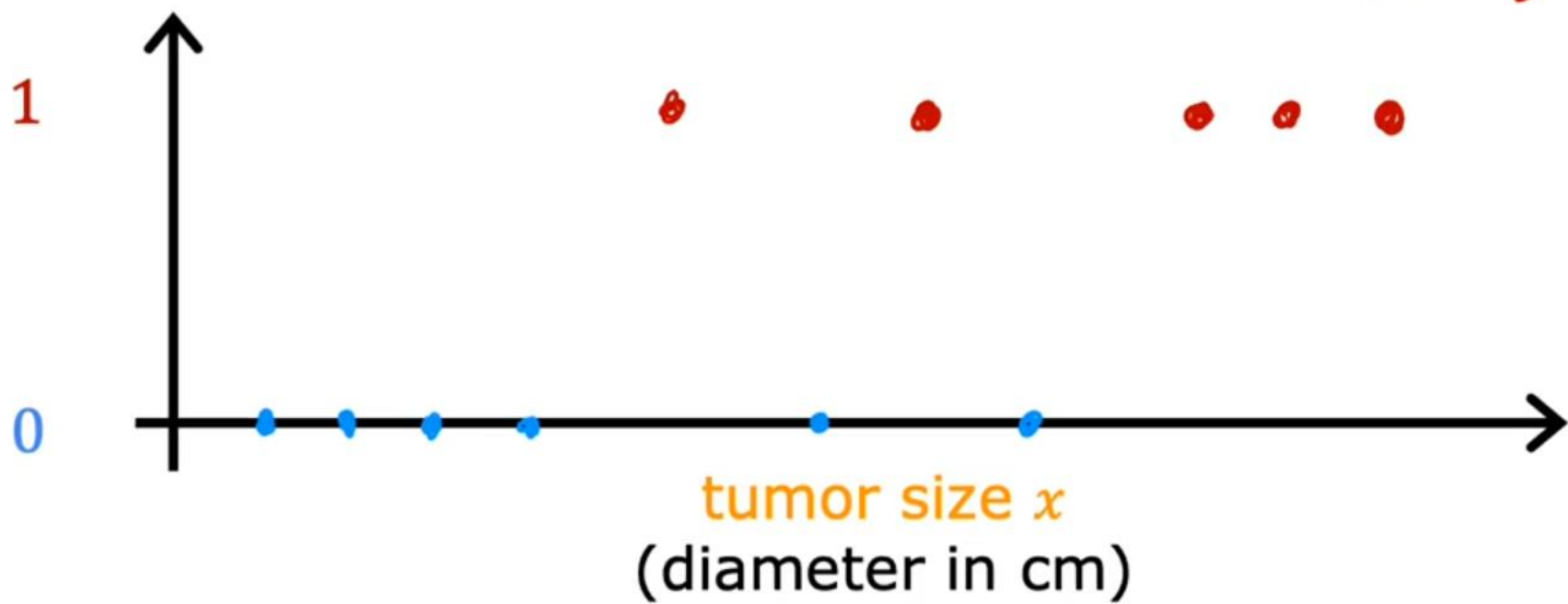
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## Supervised Learning Part 2

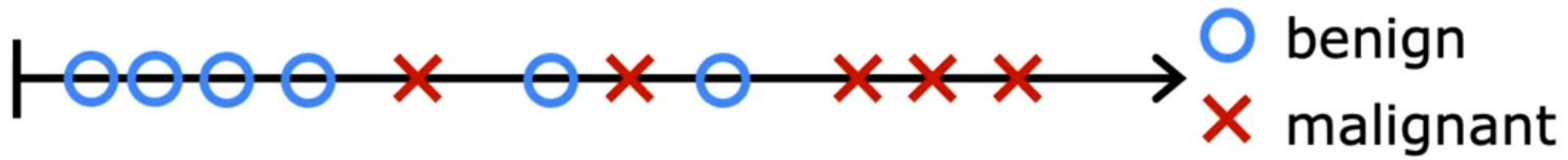
# Classification: Breast cancer detection



malignant benign



size	diagnosis
2	0
5	1
1	0
7	1
⋮	



# Classification: Breast cancer detection

- benign
- ✗ malignant *type 1*
- △ malignant type 2



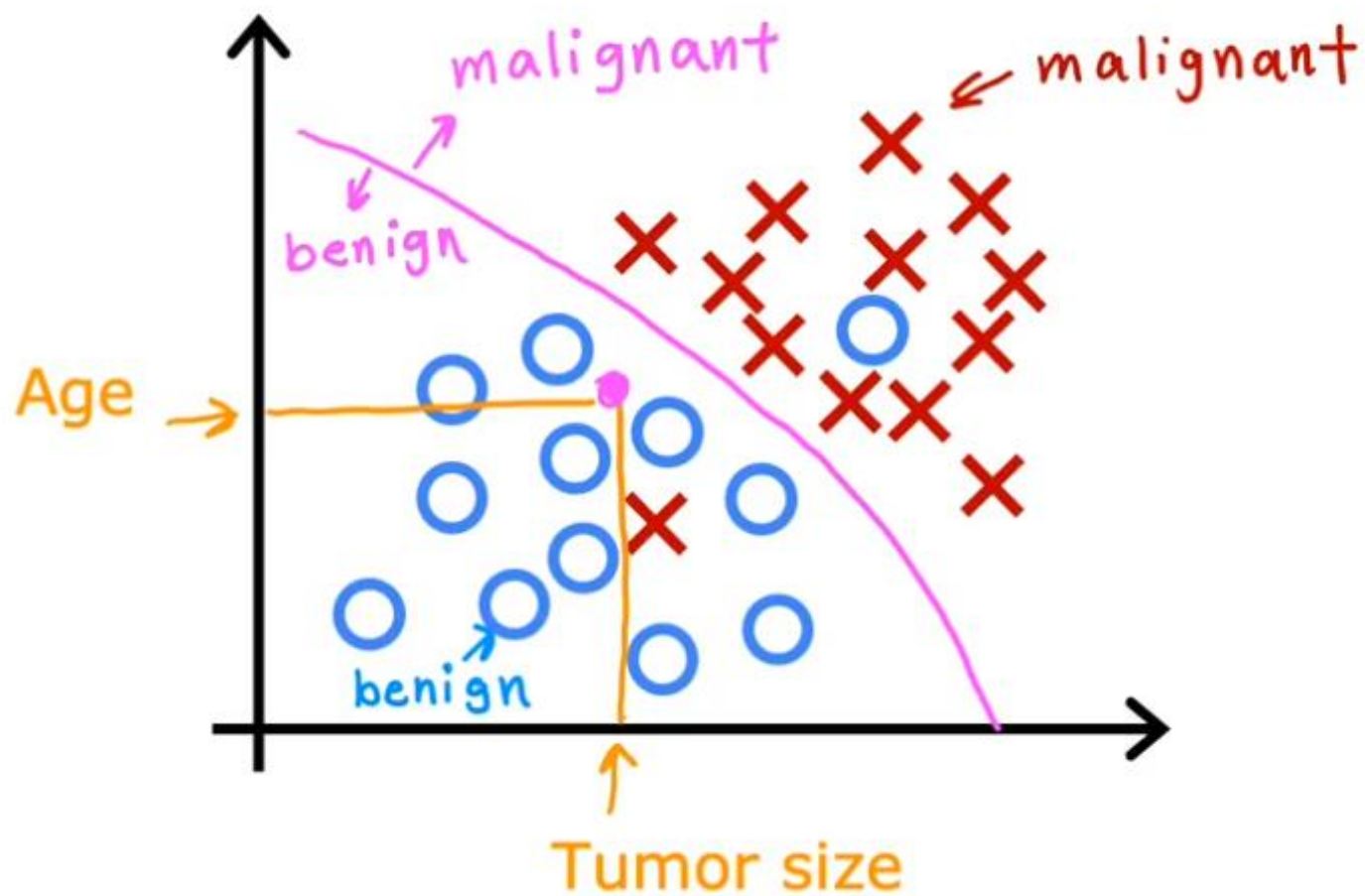
*class category*

Classification

predict *categories*    *cat dog*    benign malignant    0, 1, 2

*small number* of possible outputs

# Two or more inputs



# Supervised learning

Learns from being given “right answers”

## Regression

Predict a number

infinitely many possible outputs

## Classification

predict categories

small number of possible outputs