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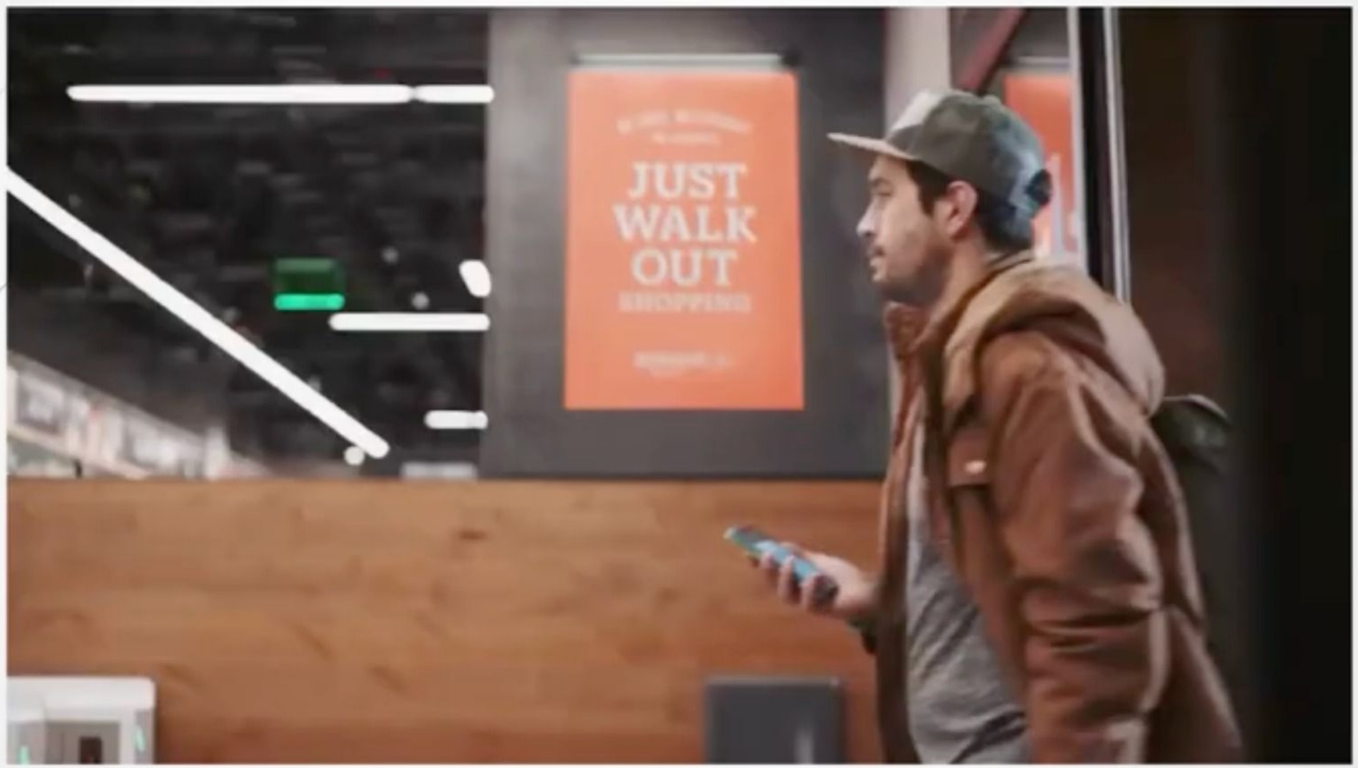
6

Amazon Go



Click to add notes

Notes | Comments | 106%

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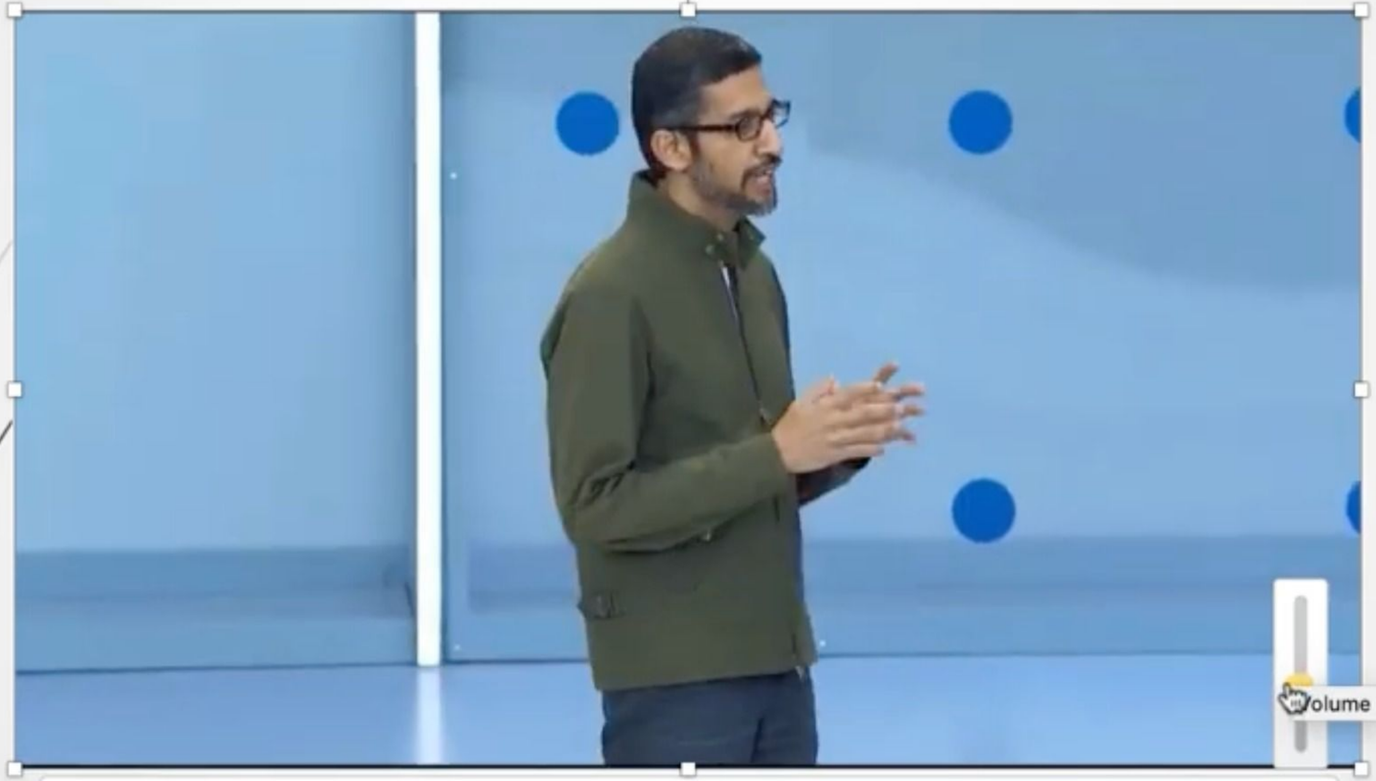
7

Google Duplex



Click to add notes

Notes | Comments | 106%

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What is Machine Learning

ML algorithm →

$f(\mathbf{x})$

Machine learning algorithms develops a mathematical model based on sample data known as training data, in order to make predictions or decisions without being explicitly programmed to do so.

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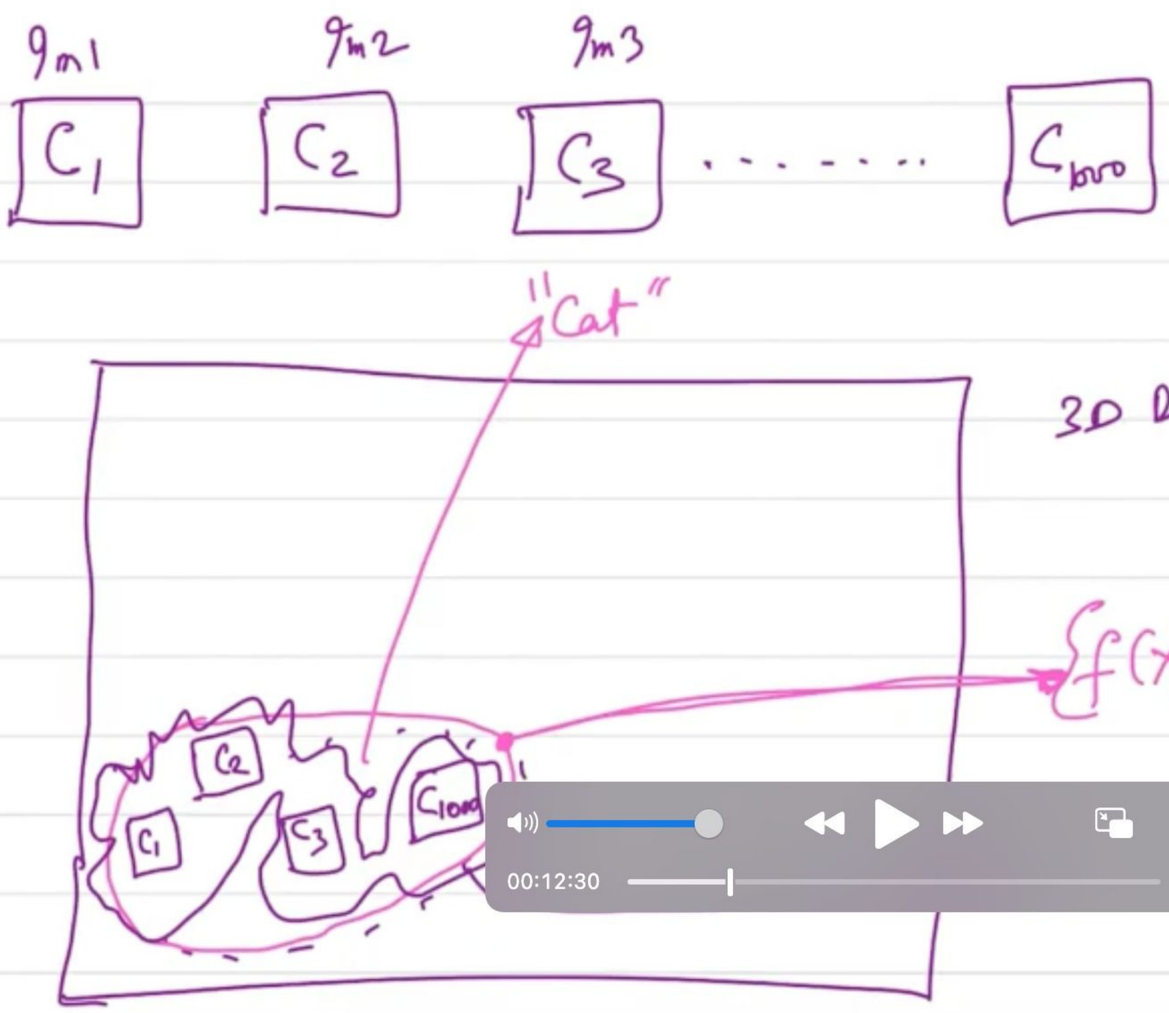

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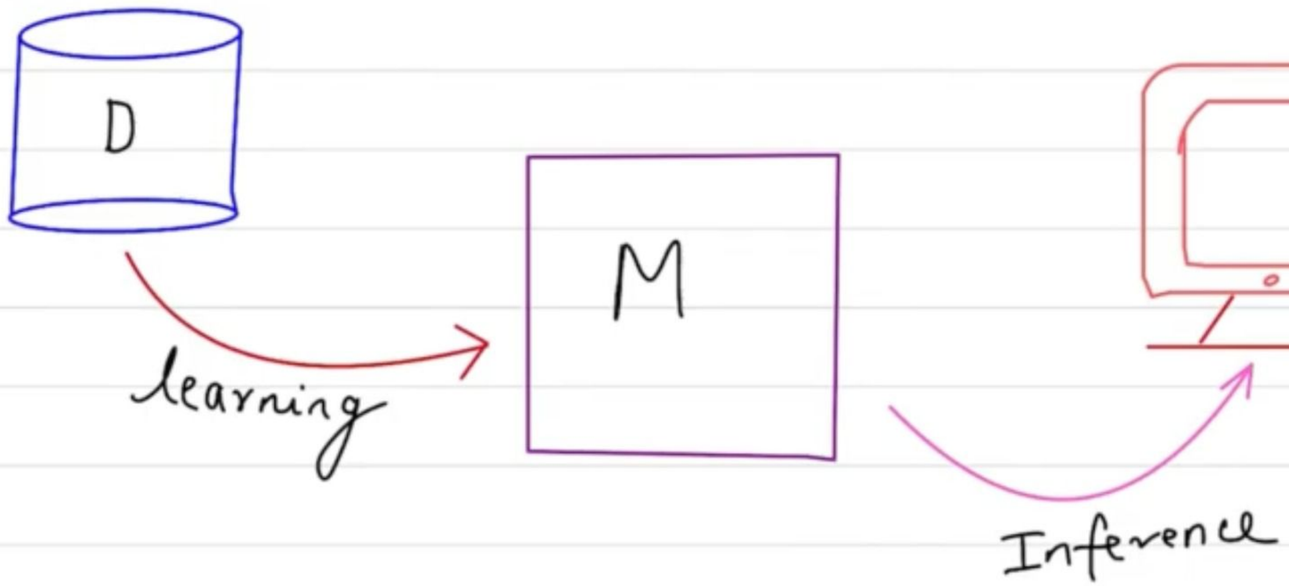

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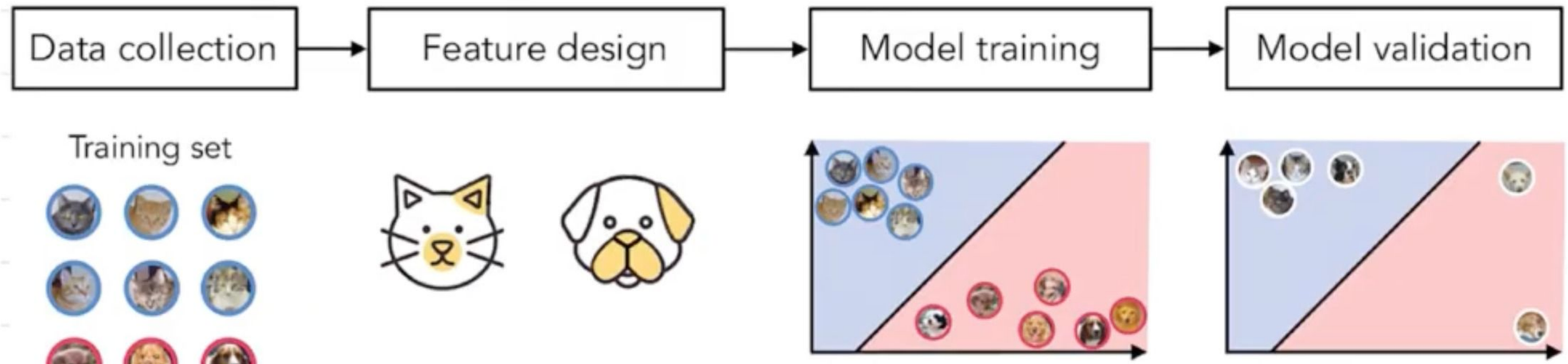

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#{Data Collection}

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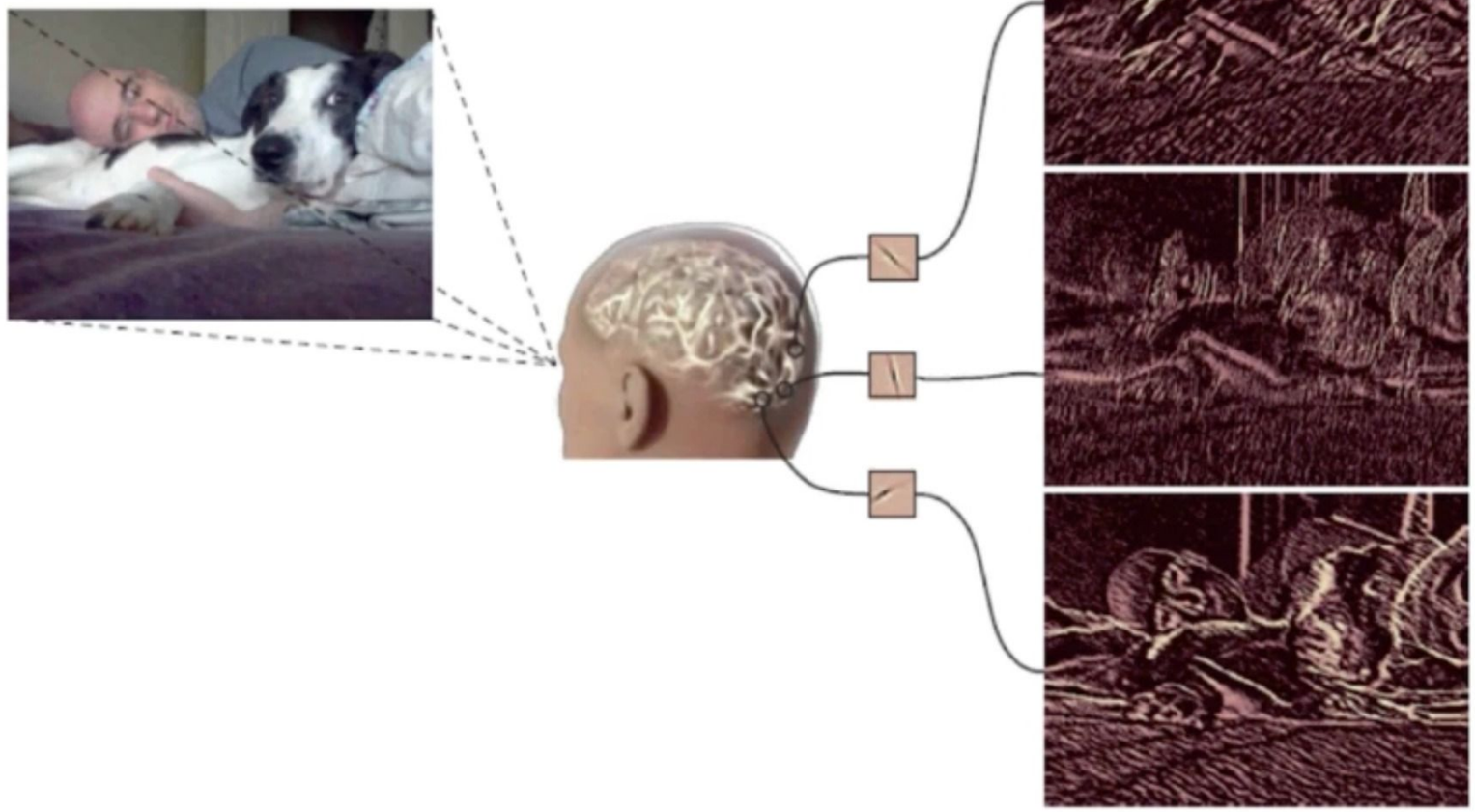
Feature Design (Motivation)



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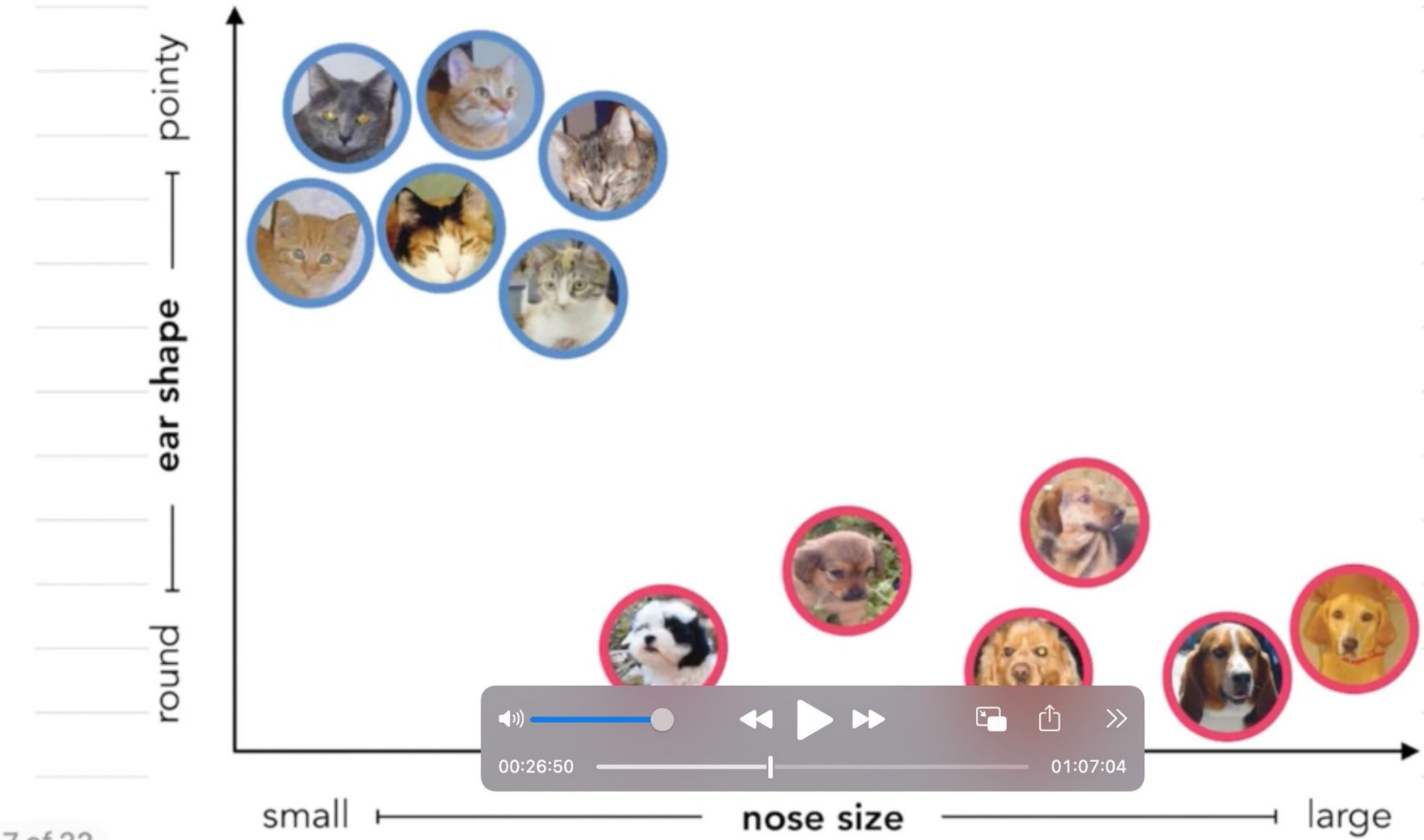
Feature Design



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Feature Design

$f_1(x)$

$f_3(x)$

$f_2(x)$

f_1

f_2

C_1

pointy — ear shape — round

small — nose size — large

00:30:12 — 01:07:04

Copy of Lecture 2 | Copy of Introduction

Feature Design

$f_1(x)$

$f_2(x)$

$f_3(x)$

C_1

pointy — round

ear shape

small — nose size — large

F_1

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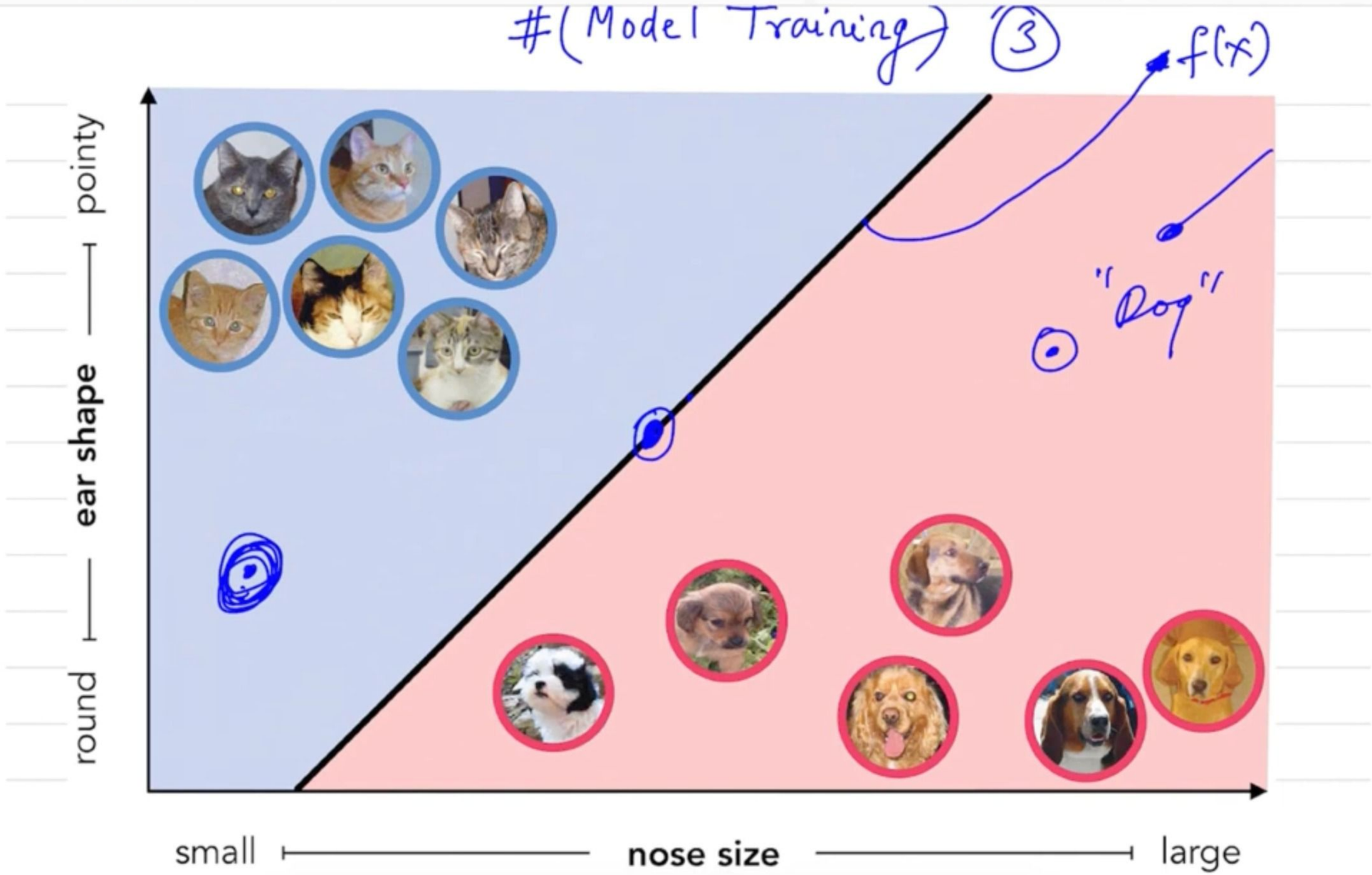
#(Model Training) (3)



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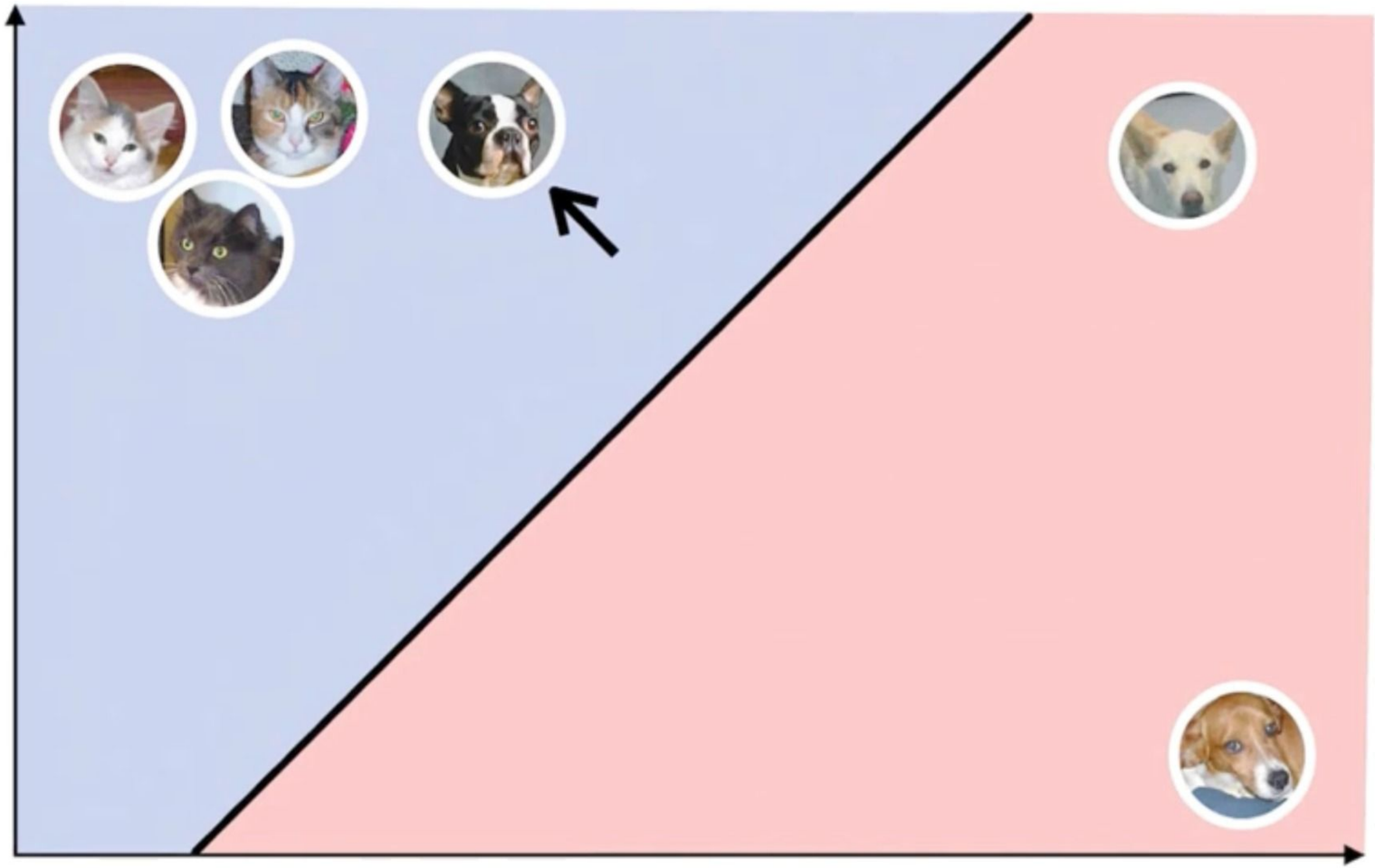
Model Validation



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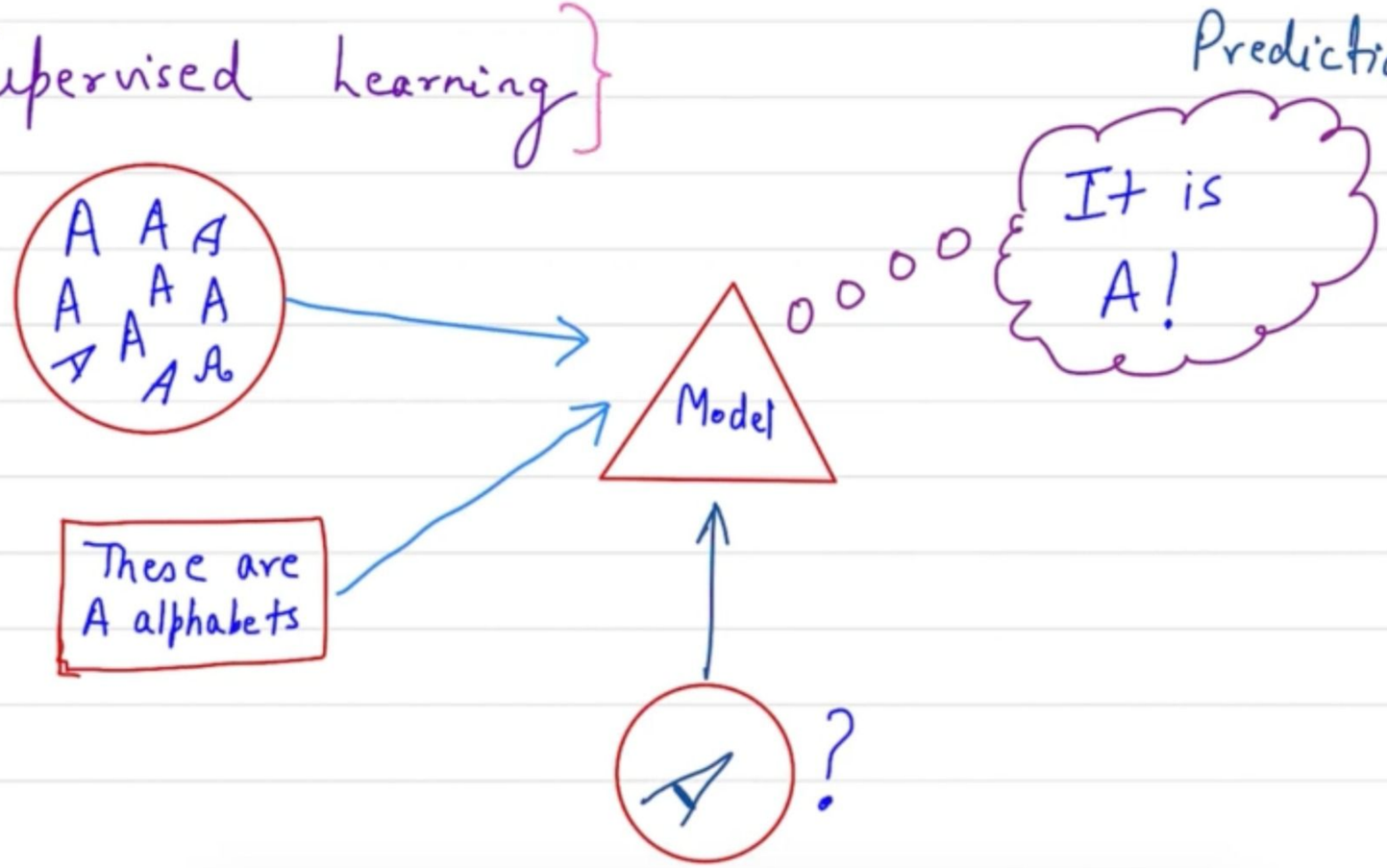
Types of Machine learning Algorithms.

① {Supervised learning}



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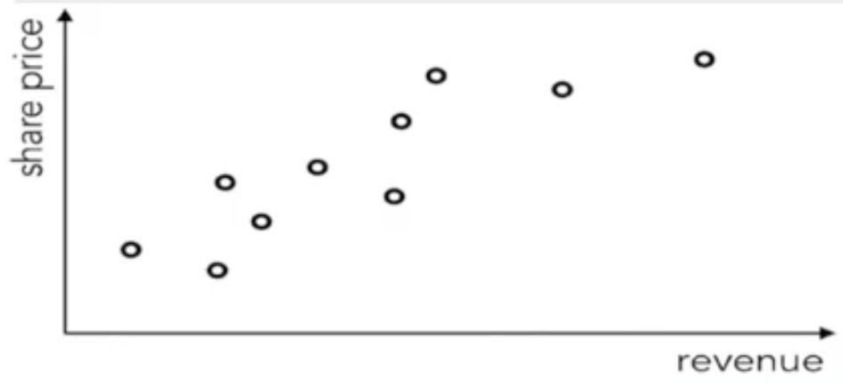
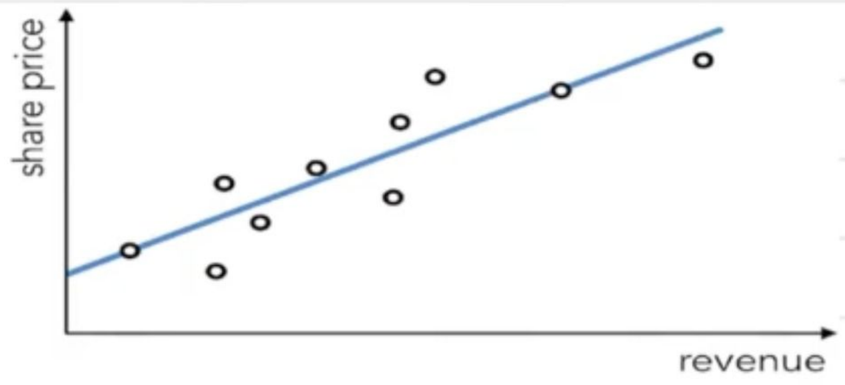
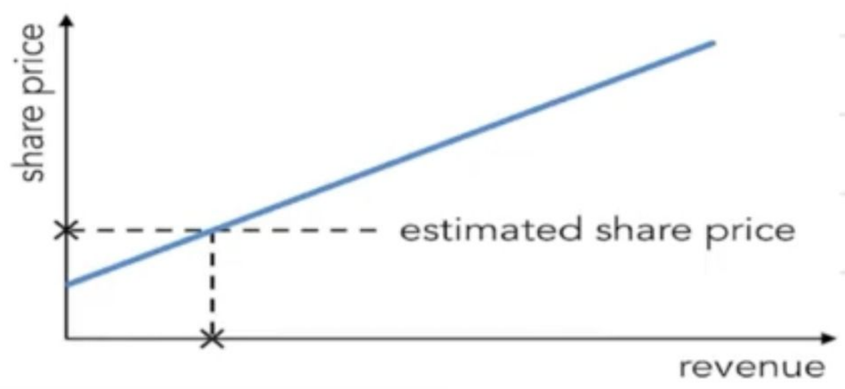
Types of Machine Learning Problem

① Supervised Machine learning (Regression)







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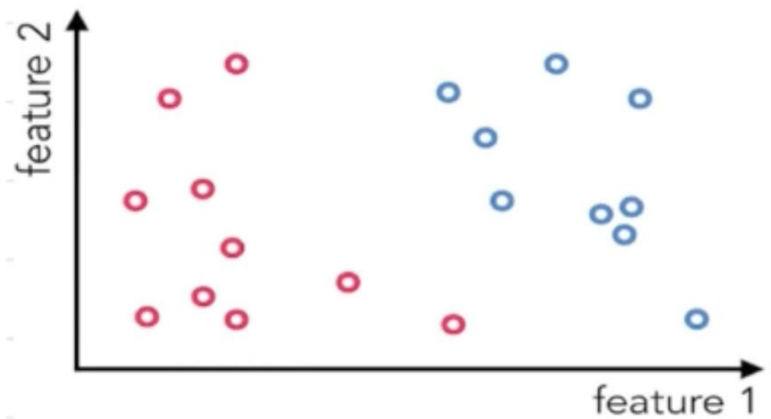
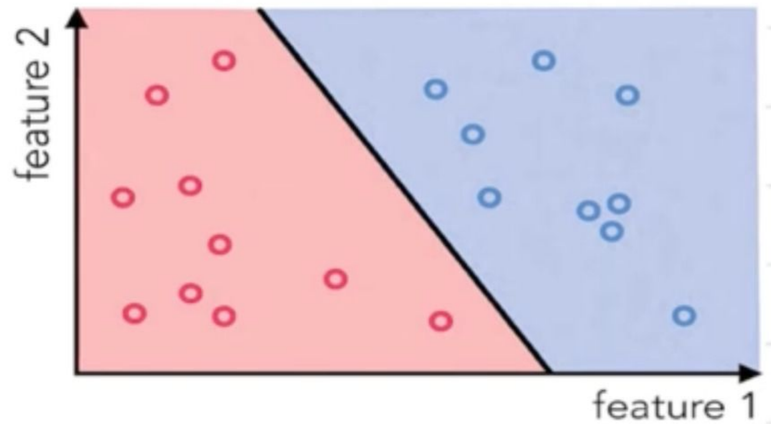
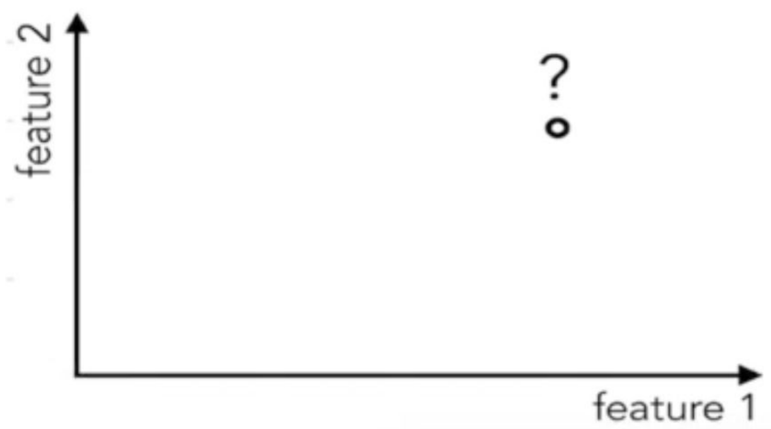
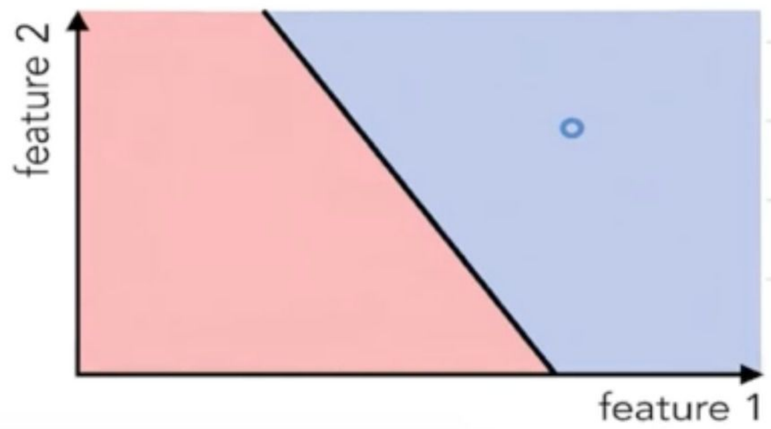
Supervised Learning (Classification)



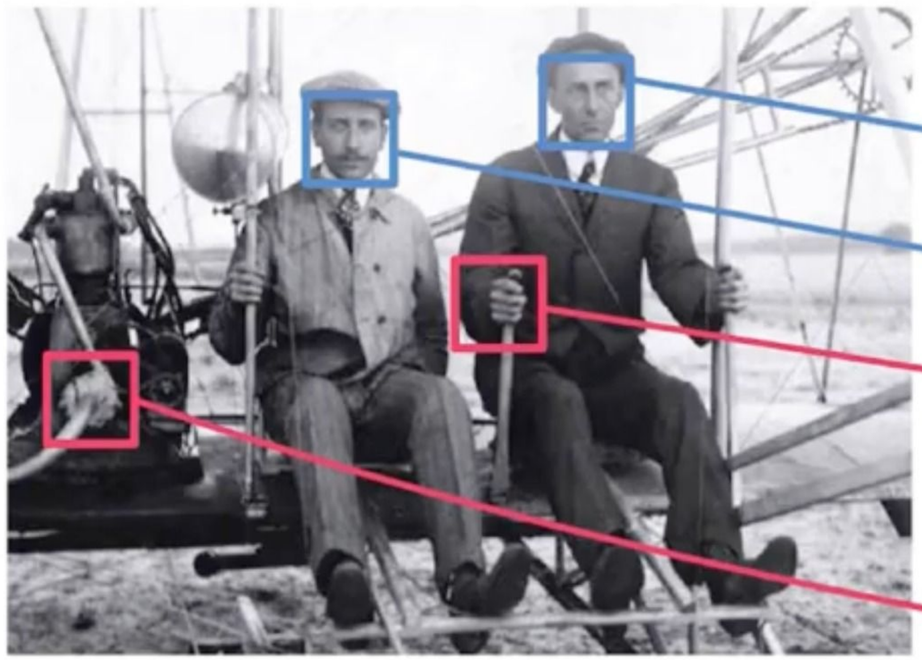




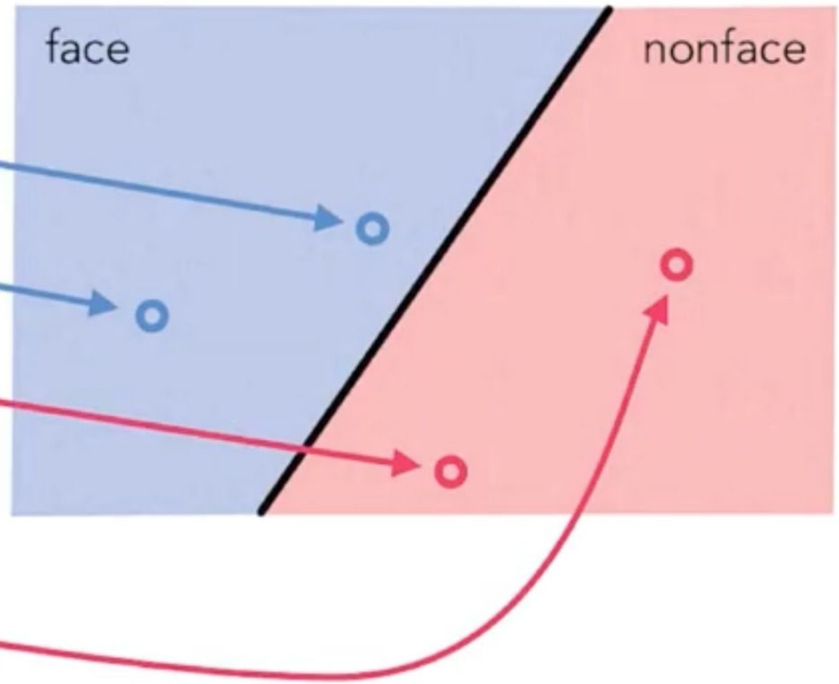


Object Detection

input image



feature space



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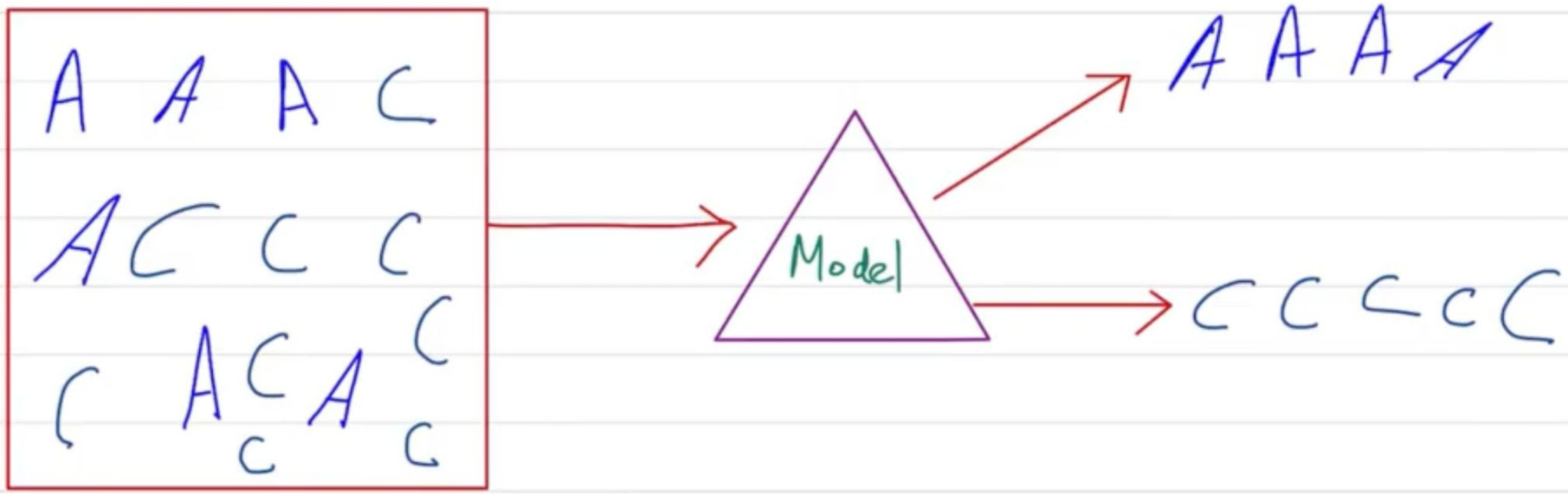

→ Two types (a) Clustering

(b) Dimensionality Reduction

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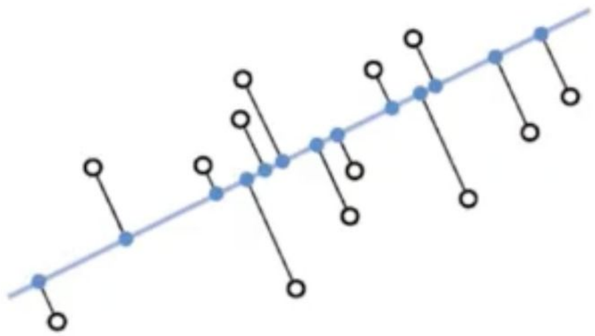
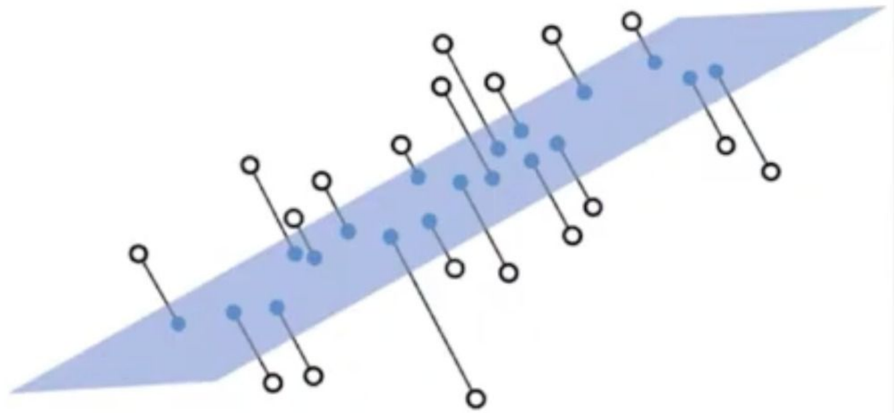
Dimensionality Reduction





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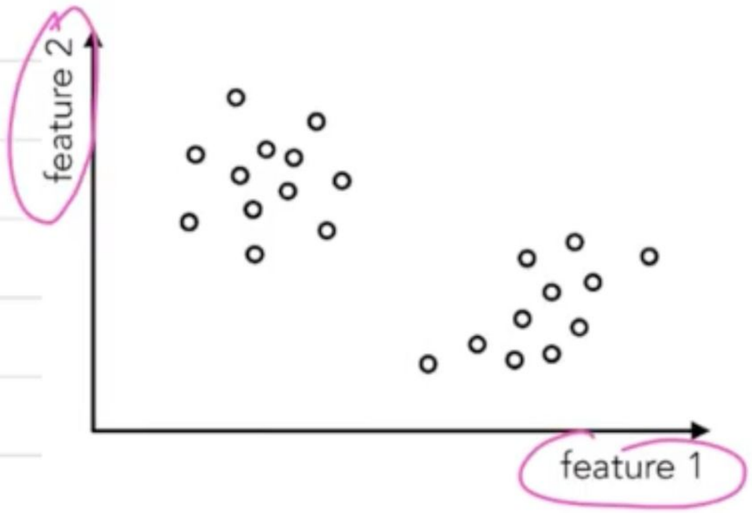
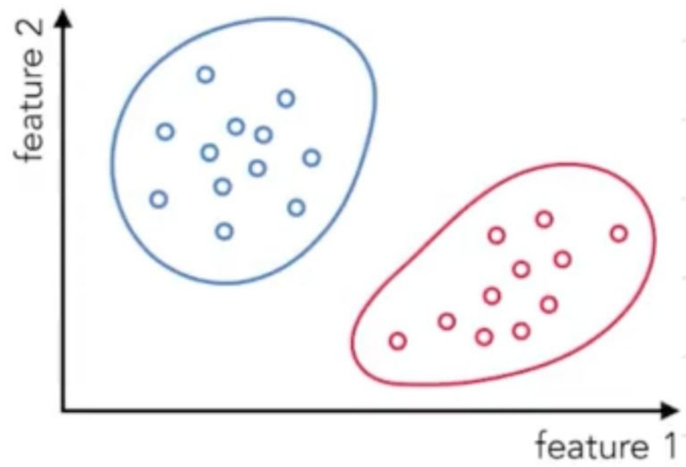
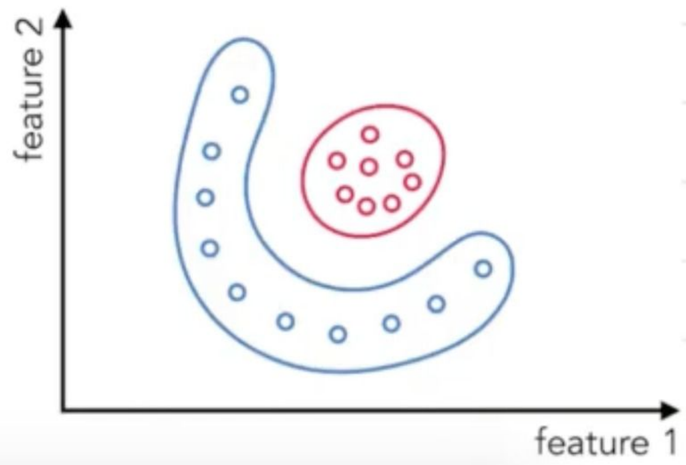
Clustering.







Semi-supervised Learning

Algorithms that deal with partially labeled training data, usually lot of unlabeled data & little bit of labeled data.

Reinforcement learning