

Types of Learning

Tuesday, January 14, 2020 13:00

Supervised Learning:

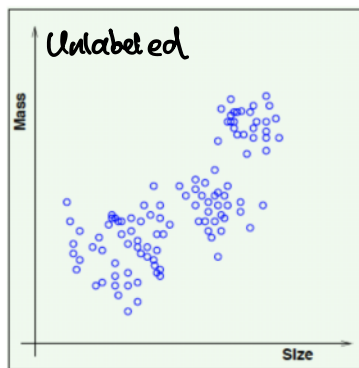
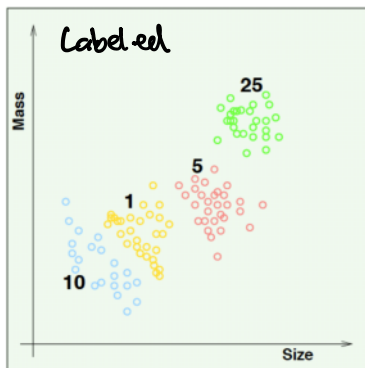
$$D = \{(x_1, y_1), \dots\}$$

↑
data is labelled (by humans — time consuming)

Unsupervised Learning:

$$D = \{x_1, x_2, \dots\}$$

↑
unlabelled



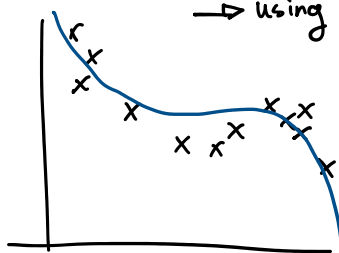
Reinforced Learning

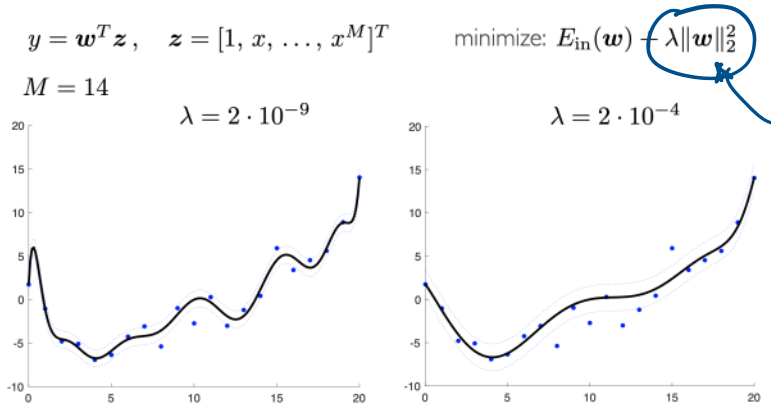
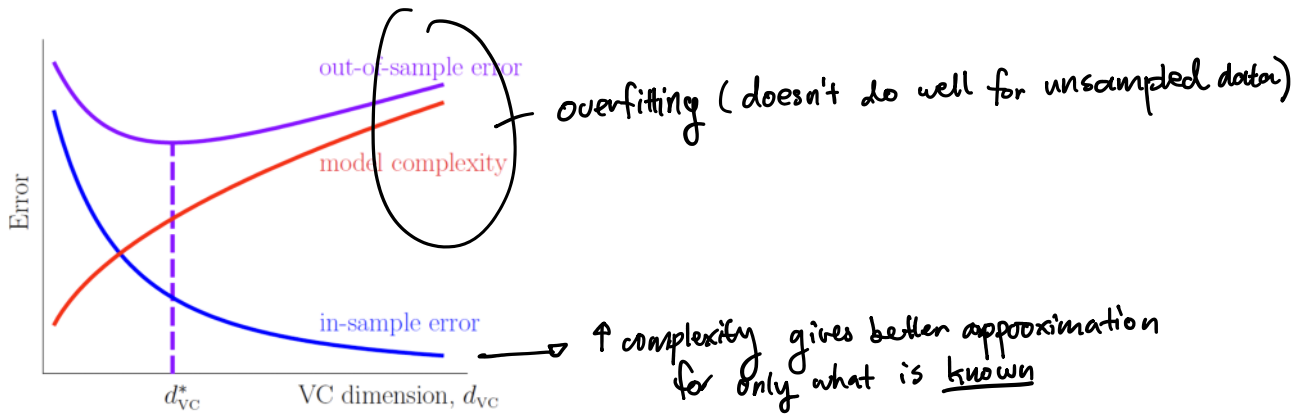
action → feedback from environment (reward / punishment) → change in behaviour.

↙
one in a while choose something else to see what happens (evolution)

Regression: (approximate interpolation)

→ using polynomials instead of just lines.





In this case, we penalize the training if the length of the function is too long
 (Regularization)
 one approach to avoid overfitting