What is Machine Learning? In-class Exercise 2

EL-GY 6143 Intro Machine Learning. Prof. Sundeep Rangan

Question

For each machine learning problem below (Problem 1 to 5), determine which type of ML algorithm would be best:

- A. Supervised learning: Classification
- B. Supervised learning: Regression
- C. Unsupervised learning
- D. Reinforcement learning

For supervised learning problems, state possible predictors and target (There is no single correct solution).

Num	ML Problem	Algorithm:	A to D
1	Estimate the increase in sales from attributes of an advertising campaign.		
2	Predict if a tissue sample is cancerous or not from an image of the tissue.		
3	Train a computer to steer a car from camera data. For training, you have recorded the steering actions of an expert human driver along with the camera data that the human saw.		
4	Train a computer to steer a car from camera data. In this case, there is no labeled data. The computer must learn how the steering affects the motion of the car.		
5	Classify survey data into groups with similar responses.		