Intro to ML Quiz

Max Score: 23

Total Time: 20 min.

Total Questions: 11

1) Give an example of where you could use Regression? (1)
2) Give 2 examples of real-life situations where unsupervised learning could be used. (2)
3) What ratio would you split your train and test dataset using? (1)
4) Name any two regression metrics. (2)
5) Give 2 examples of messy/noisy/unclean data. (2)
6) Explain why we would split a dataset into train and test? (2)
7) Calculate the RMSE for the following points: (3)
   - Actual datapoints: 1, 2, 3, 4, 5
   - Corresponding Predicted points: 2, 5, 0, 1, 3
8) Explain whether given scenario is a case of Supervised or Unsupervised Learning:
   We are considering launching a new product and wish to know whether it will be a success or a failure. We collect data on 20 similar products that were launched. For each product we have recorded whether it was a success or a failure, price charged for the product, marketing budget, competition price, and ten other variables. (1)
9) Explain whether given scenario is a classification or regression problem:
   We are interested in predicting the % change in the US dollar in relation to the weekly change in the world stock markets. Hence, we collect weekly data for all of 2012. For each week we record the % change in the dollar, % change in the US market, % change in the British market and the % change in German market. (1)
10) Mention the steps involved in the workflow of creating a machine learning solution. (3)
11) How would you approach solving the following problem using ML (try to mention all the steps from the start to the end)?
    Your teacher tells you to build a model to predict how much each student in the class will score in their end semester exams? (5)