

MACHINE LEARNING WORKSHEET 1 (ANSWERS)

- 1.
2. A) Linear regression is sensitive to outliers
3. B) Negative
4. B) Correlation
5. C) Low bias and high variance
6. B) Predictive model
7. B) Removing outliers
8. A) Cross validation
9. A) TPR and FPR
10. B) False
11. B) Apply PCA to project high dimensional data
12. A, C, D
13. Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting.
14. Ridge Regression (L2 Norm); Lasso (L1 Norm); Dropout
15. the error is the difference between the expected price at a particular time and the price that was actually observed.

STATISTIC WORKSHEET – 1 (ANSWERS)

1. a) True
2. a) Central Limit Theorem
3. ..
4. d) All of the mentioned
5. c) Poisson
6. b) False

7. b) Hypothesis
8. a) 0
9. c) Outliers cannot conform to the regression relationship
10. A normal distribution is an arrangement of a data set in which most values cluster in the middle of the range and the rest taper off symmetrically toward either extreme.
11. Deletions. Pairwise Deletion. Listwise Deletion/ Dropping rows. Dropping complete columns. Basic Imputation Techniques. Imputation with a constant value. Imputation using the statistics (mean, median, mode)
12. A/B testing is the process of comparing two variations of a page element, usually by testing users' response to variant A vs. variant B and concluding which of the two variants is more effective.
13. Mean imputation is typically considered terrible practice since it ignores feature correlation.
14. Linear regression strives to show the relationship between two variables by applying a linear equation to observed data. One variable is supposed to be an independent variable, and the other is to be a dependent variable. For example, the weight of the person is linearly related to his height.
15. There are three real branches of statistics: data collection, descriptive statistics and inferential statistics.

PYTHON WORKSHEET -1 (ANSWERS)

1. C) %
2. B) 0
3. C) 24
4. A) 2
5. D) 6
6. C) the finally block will be executed no matter if the try block raises an error or not.
7. A) It is used to raise an exception
8. C) in defining a generator
9. A) _abc C) abc2
10. D) all of the above

11 to 15 done in jupyter file .