MACHINE LEARNING ASSIGNMENT

1. A
2. A
3. B
4. C
5. C
6. B
7. D
8. D
9. C
10. B
11. B
12. A & B

13. Explain the term regularization?

    Regularization is the term used to represent the process of making things acceptable from it previous state. In machine learning, this technique is used to minimize error from a model by avoiding overfitting and to train the model to work better. Training for a longer period makes the model learn irrelevant data, thus contributing to overfitting, hence regularization becomes an effective way of improving the accuracy of the model

14. Which particular algorithms are used for regularization?

    The algorithms usually used for regularization is Laso regression or Ridge regression. Lasso is short for the Least Absolute Shrinkage and Selection Operator. Lasso adds the magnitude's absolute value to the coefficient. On the other hand, in using Ridge regression, the penalty term of the loss function is the squared magnitude of the coefficient. In this method, the value of lambda is zero because adding a large value of lambda will add more weights, causing underfitting.

15. Explain the term error present in linear regression equation?

    In linear regression, the term error usually indicates the level of uncertainty in the model. It is usually the residua variable that shows the lack of perfect goodness of fit. In linear regression this is represented by mean-square error (MSE) – a measure of the difference between the y-value and predicted y-value at each value of x, and squaring it up.