Assignment 4

The due date for submitting this assignment has passed. Due on 2018-02-21, 23:59 IST.

Submitted assignment

1) Which of the following is not true about Classification Matrix?

1 point

(a) Most accuracy measures are derived from the classification matrix
(b) Classification matrix is also called as confusion matrix
(c) It summarizes only incorrect classifications
(d) Rows and columns of the classification matrix correspond to the true and predicted classes

No, the answer is incorrect.
Score: 0

Accepted Answers:
(c) It summarizes only incorrect classifications

2) A main accuracy measure is the estimated misclassification rate, also called the overall error. It is given by:

1 point

(a) $err = \frac{n_{0,1} + n_{1,0}}{n}$
(b) $err = \frac{n_{1,1} + n_{0,0}}{n}$
(c) $err = \frac{n_{0,1} + n_{1,0}}{n+1}$
(d) $err = \frac{n_{0,1} + n_{1,0}}{n-1}$

No, the answer is incorrect.
Score: 0

Accepted Answers:
(a) $err = \frac{n_{0,1} + n_{1,0}}{n}$

3) Which of the following is correct formula for accuracy?

1 point

(a) $Accuracy = \frac{n_{0,0} + n_{1,1}}{n}$
(b) $Accuracy = \frac{n_{0,1} + n_{1,0}}{(n+1)}$
(c) $Accuracy = \frac{n_{0,1} + n_{1,0}}{(n-1)}$
(d) $Accuracy = \frac{n_{0,1} + n_{1,0}}{n}$

No, the answer is incorrect.
Score: 0

Accepted Answers:
(a) $Accuracy = \frac{n_{0,0} + n_{1,1}}{n}$

4) ROC in performance metrics stands for?

1 point

(a) Reverse operating characteristic
(b) Receiver operating characteristic
(c) Remote operating characteristic
(d) Revise operating characteristic
5) Statement I: The first step is most classification algorithms is to estimate the probability that a case belongs to each of the classes.

Statement II: if overall classification accuracy is of interest, the case can be assigned to the class with the highest probability.

Which of the following is true?

(a) Statement I is true and Statement II is false
(b) Statement II is true and Statement I is false
(c) Both the statements are true
(d) None of the statement are true

6) The default cutoff value in two-class classifiers would be-

(a) 0.2
(b) 0.1
(c) 0.5
(d) 1

7) For two class classifiers, if the probability of a record being a class 1 member is greater than 0.5, then that record is classified as-

(a) 1
(b) 0
(c) Both 1 and 0
(d) None of these

8) For two class classifiers, if the probability of a record being a class 1 member is less than 0.5, then that record is classified as-

(a) 1
(b) 0
(c) Both 1 and 0
(d) None of these

9) Average misclassification cost can be estimated by-

(a) \( \frac{c_{0n,1}+c_{1n,0}}{n} \)
(b) \( \frac{c_{0n,1}+c_{1n,1}}{(n+1)} \)
(c) \( \frac{c_{0n,1}+c_{1n,1}}{(n-1)} \)
(d) \( \frac{c_{0n,1}+c_{1n,0}}{1} \)
10. Typically, classification matrix considers-

- (a) Actual Class
- (b) Predicted Class
- (c) Both a) and b)
- (d) None of these

No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
(c) Both a) and b)