

Machine Learning - Set 1

This test intends to check your knowledge on data science & machine learning algorithms. It touches upon the topic of how to identify attributes that are most informative with respect to estimating the value of target variable.

Q: Predictive models having target attribute having discrete values can be termed as _____

- ☐ Regression models
- ☒ Classification models

Q: Higher value of entropy would mean which of the following

- ☒ Properties values belongs to mixed classes of values.
- ☐ Properties have just one class of values.

Q: Entropy value ranges from

- ☒ 0 to 1
- ☐ 0 to 100
- ☐ -1 to +1

Q: Entropy value near 0 would mean that properties' values are

- ☐ Impure
- ☒ Pure or homogenous

Q: Which of the following can be used to identify attributes that could impact the target variable in data analysis?

- ☐ Information gain
- ☐ Entropy
- ☒ Both of the above
- ☐ None of the above

Score Card

Total no. of questions: 10

No. of questions attempted: 10

No. of correct answers: 10

Overall score: 10/10

Show Score

Show Answers

Q: While selecting effective attributes that impact target attribute, the objective is to analyze attributes which could

- ☒ Decrease overall entropy value
 - ☐ Increase overall entropy value
-

Q: Following formula, $-p_1 \log(p_1) - p_2 \log(p_2) - p_3 \log(p_3) - \dots$, determines which of the following?

- ☐ Information gain
 - ☒ Entropy
-

Q: Properties have equally distributed discrete values would said to have entropy value near to _____

- ☒ 1
 - ☐ 0
-

Q: Selection of attributes should be done in a way that satisfies following criteria

- ☒ Reduces the Entropy
 - ☐ Increases the entropy
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Q: In a decision tree, which of the following is used to represent a segment?

- ☐ Root node
 - ☐ Interior nodes
 - ☒ Leaf node
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