Contrasting Models

LATEST SUBMISSION GRADE
100%

1. Given the same data, what does increasing model complexity do for the ability of the final QuAM to generalize? 1 / 1 point

- ○ Generalization ability goes up until it starts underfitting, and then it goes down.
- ○ Generalization ability always increases.
- ○ Generalization ability always decreases.
- ◉ Generalization ability goes up until it starts overfitting, and then it goes down.

Correct
Correct, at least in general. Increasing the complexity of the model can improve generalization but only until it starts overfitting to the training data.

2. Why would you use Root Mean Squared Error(RMSE) over Mean Squared Error (MSE) ? 1 / 1 point

- ○ RMSE has the same units as the inputs provided to the QuAM
- ◉ RMSE has the same units as the predicted value
- ○ MSE has the same units as the inputs provided to the QuAM

Correct
Correct. Nicely Done!

3. What is the formula for Recall measure ? 1 / 1 point

- ○ (True Positives + True Negatives) / Total examples
- ○ True Positives / (True Positives + False Positives)
- ◉ True Positives / (True Positives + False Negatives)
- ○ True Negatives / (True Negatives + False Positives)

Correct
Correct. Nicely Done!

4. If you have an ROC curve with AUC value of 0.4, what would this indicate ? 1 / 1 point

- ○ The model is as good as making random guesses
- ◉ The model is performing worse than random guessing
- ○ The model is misclassifying everything
- ○ The model is performing well

Correct

5. Which of the following statements are true regarding splitting time series data into train and test data ? 1 / 1 point

- ☐ You can randomly split your dataset into train and test data
- ☐ For time series data, it isn't necessary to split into train and test data
- ☑ Remove all the temporal dependencies by adding more features and then randomly split the data

Correct
Correct answer!

- ☑ Use the first x% of your chronologically ordered data as train data and test on the remaining data

Correct
Correct answer!

6. Under what circumstances would you use Cross Validation? 1 / 1 point

- ◉ When your dataset is small and you want to use as much data for your training and validation
- ○ When your dataset is large and you don't care if you waste more data
- ○ Because you don't need test data
- ○ You never Cross validate, because Cross Validation is a myth

Correct
Correct. Nicely Done!

7. Which dataset you would use for hyperparameter tuning? 1 / 1 point

- ○ Training dataset
- ◉ Validation dataset
- ○ Test dataset
- ○ All the learning data

Correct
Correct. Nicely done!