

Ensemble Techniques

Learning Objective of the session:

- To have a collaborative and interactive flipped classroom session to establish an understanding of the topics of the week through doubts clarification and hands on exercise.

Agenda of the session:

- Gauging learner's understanding on the topic of the week.
- Understanding the concepts clarity of the learners on:
 - Ensemble Techniques and its need. Bagging, boosting and different types of boosting, Random Forest.
- Case Studies (Hands on) on the topics mentioned.
- Doubts solving, industry perspective and practices.
- Summary of the session's learning.

Structure of the Session

Duration	Topic	Details
10 min	<ul style="list-style-type: none"> Gauge learner's understanding on Ensemble Techniques 	<ul style="list-style-type: none"> Go through all the learners in the group and try to understand the reach of the week's learning within the group on the week's topics. Highlight the important concepts majority of the group is facing doubts on.
20 min	<ul style="list-style-type: none"> Concepts clarity of the covered topics. 	<ul style="list-style-type: none"> Clarify the concepts on the doubts identified.
60 min	<ul style="list-style-type: none"> Case study: Ensemble Techniques 	<ul style="list-style-type: none"> Use the case study provided to have a hands on exercise. Explain the problem statement, features and data preprocessing and use various techniques to come to a result through the model. Data : winequality-red.csv
25 min	<ul style="list-style-type: none"> Doubts clearance Industry perspective on the mentioned topics Buffer 	<ul style="list-style-type: none"> Use this time to clarify additional doubts. Also, explain the industry practices on the techniques as per your experience.
5 min	<ul style="list-style-type: none"> Summarize the session 	<ul style="list-style-type: none"> Provide a summary of the session.