

SESSION PLAN 22

Session Name

Gradient Boosting Machines

Learning Outcomes

- Understand the intuition behind boosting methods
- Work with different types of boosting methods

Prerequisites for the Student

- Gradient Boosting Machines - Go through the concept and solve the tasks and assessments.

Student Activities

- Discuss with the Mentor what you have learned.
- Overview of Gradient Boosting Machines
 - Adaboost
 - Gradient Boosting
 - XGBoost
- Gradient Boosting from Scratch:-
<https://medium.com/mlreview/gradient-boosting-from-scratch-1e317ae4587d>
- Adaboost for dummies:
<https://towardsdatascience.com/adaboost-for-dummies-breaking-down-the-math-and-its-equations-into-simple-terms-87f439757dcf>
- How boosting is different from other ensemble methods?
- How is the Gradient Boosting Algorithm Works?
- Practice problem on Gradient Boosting Machines
 - Refer the GitHub repo for problems
- Quiz on Gradient Boosting Machines.
- Code Along.
- Questions and Discussion on doubts - AMA

Next Session

- Concept - Machine Learning: Clustering/ k-means(30 min)
- Key topics to be highlighted - highlight where they would need to spend more time and importance w.r.t Data Science.
 - Unsupervised learning methods
 - Working of Clustering methods
 - K-Means and Hierarchical clustering