

Session Plan

Intro to Machine Learning and Linear Regression

Learning Objective

• 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
 - Machine learning, supervised and unsupervised learning, training and testing data.
 - Training and Testing data, overfitting and under fitting.
 - Linear Regression, simple regression and multiple regression.
 - Best fit analysis, r squared.
- Case Studies (Hands on) on the topics mentioned.
- Doubts solving, industry perspective and practices.
- Summary of the session's learning.

Structure of the Session:

<u>Duration</u>	<u>Topic</u>	<u>Details</u>
10 min	Gauge learner's understanding	 Ask the learners in the group about the understanding of the week's topics. Identify the important concepts majority of the group is facing doubts on.
20 min	Concepts clarity	 Clarify the concepts on the doubts raised/identified.
60 min	• Case Study Hands on	 Use the case study provided to have a hands on session to demonstrate topics covered in the week. Explain the problem statement, attributes and the steps to follow. Dataset used: LGD.csv
25 min	Extended Doubts Clearing and Industry perspective discussion	 Use this time to clarify additional doubts. Also, explain the industry practices as per your experience.
5 min	Summarize the session	Provide a summary of the session