

The background of the entire slide is a dense field of 3D-rendered numbers in various shades of blue. The numbers are of different sizes and are scattered across the frame, creating a sense of depth and a data-oriented aesthetic.

PRERANA DAS

SREE KAILASH
RAVICHANDAR

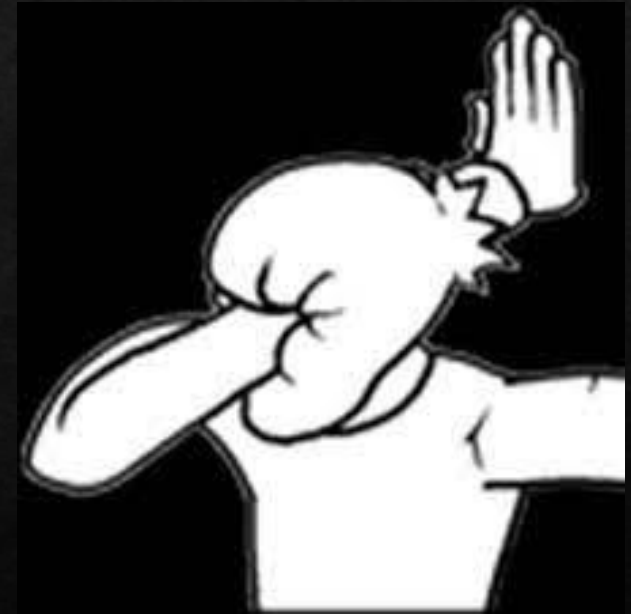
TARONISH ADIL
GOTLASETH

Credit Default Prediction DM Project

Presented by the group
“Minotaurs”

SAME AS EVERYONE!!! AGENDA!!!

- ◆ PROJECT OBJECTIVE
- ◆ EXPLORATORY DATA ANALYSIS
- ◆ DATA TRANSFORMATION
- ◆ FINAL MODELS
- ◆ CONCLUSION AND LEARNING





BUSINESS OBJECTIVE

The business objective is to predict credit default!

Description of business problem:

Develop a predictive model that utilizes historical payment status and certain demographical information to evaluate the likeliness of credit default



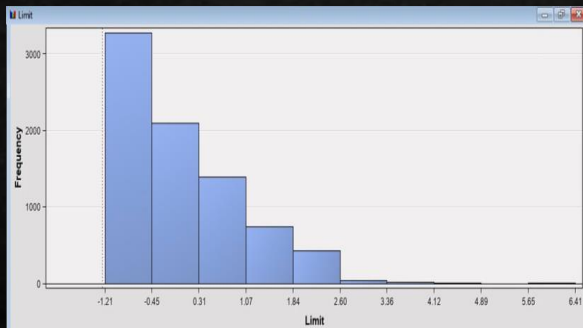
EXPLORATORY DATA ANALYSIS

2 Class Inputs
21 Interval Inputs

Checked for statistical measures
(Mean, Min, Max, SD, Skewness, Kurtosis)

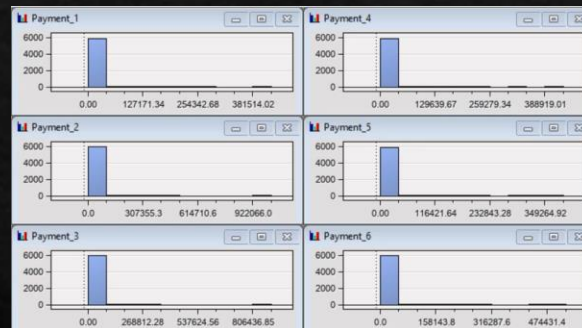
0% of missing data

LIMIT



Skewed Distribution

PAYMENT



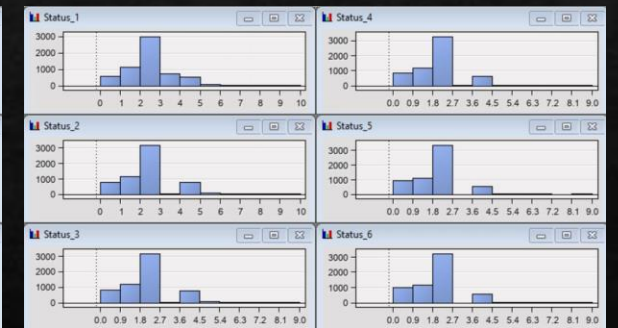
Skewed Distribution

STATEMENT

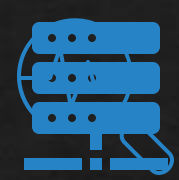


Skewed Distribution

STATUS



Good Distribution



DATA TRANSFORMATION

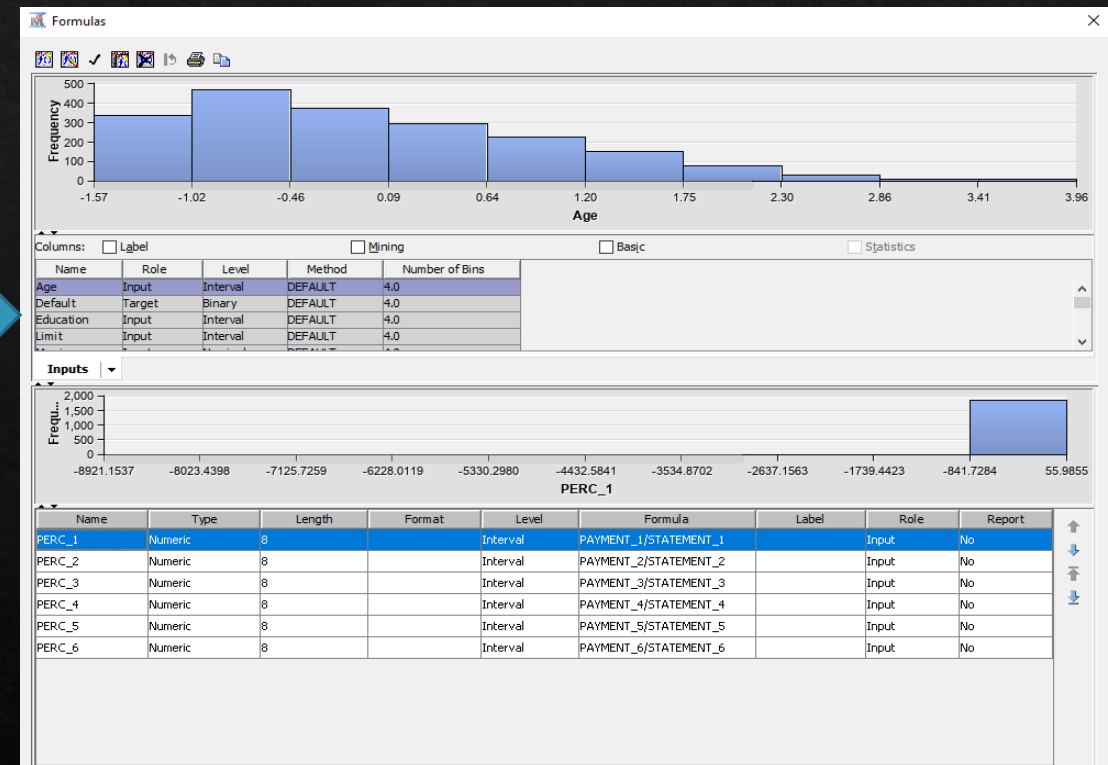
CUSTOM TRANSFORMATIONS

COLUMN	TRANSFORMATION
Marriage, Sex	Dummy indicators
Statement 1... Statement 6	Best
Status 4	Best



NEW VARIABLES

Percentage Of Statement Paid = Payment/Statement

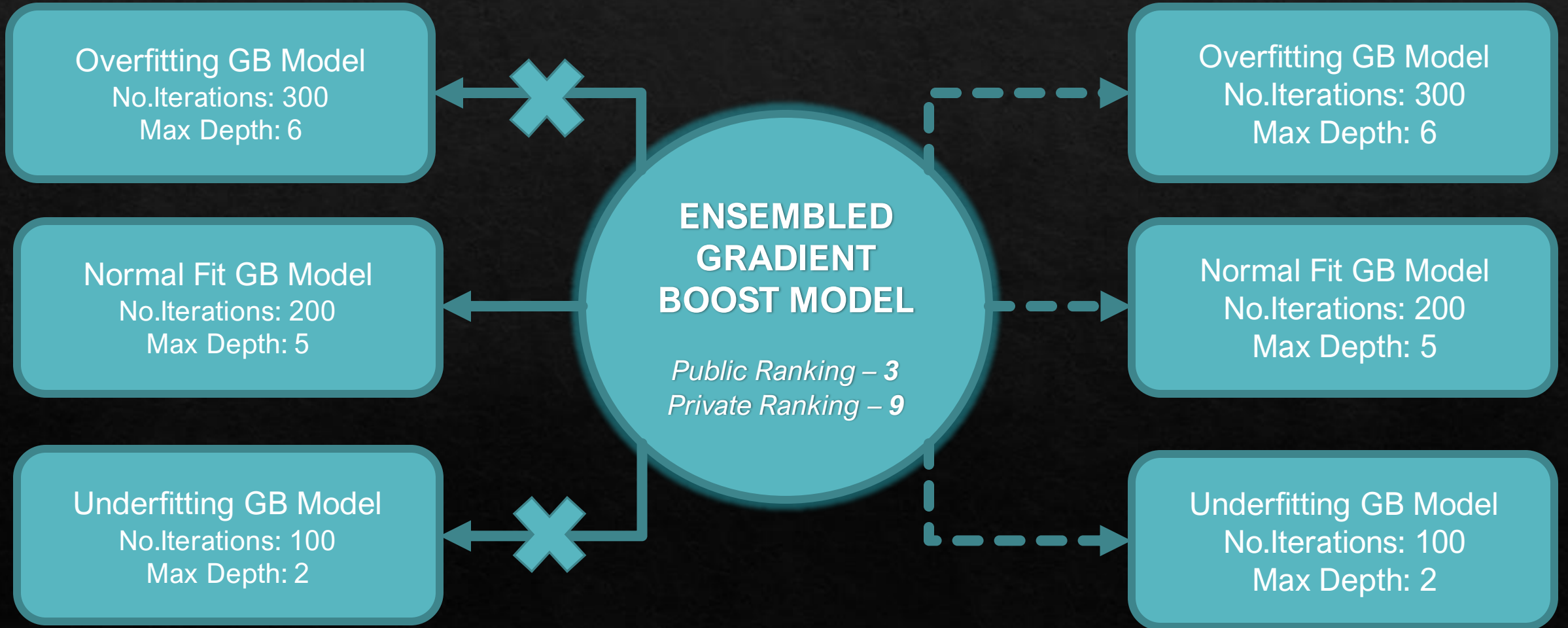




FINAL MODELS

Public Leaderboard ROC: 0.75042
Private Leaderboard ROC: 0.75051

Public Leaderboard ROC: 0.75145
Private Leaderboard ROC: 0.74979



CONCLUSION AND LEARNING

Feature Engineering is as important as any other stage, to better the performance of ML algorithm

Gradient Boost provides great models reducing overfitting, compared to other models

Ensemble Models provide the most robust and superior results by combining multiple models

A choice based on **both training and validation ROC** is always more stable



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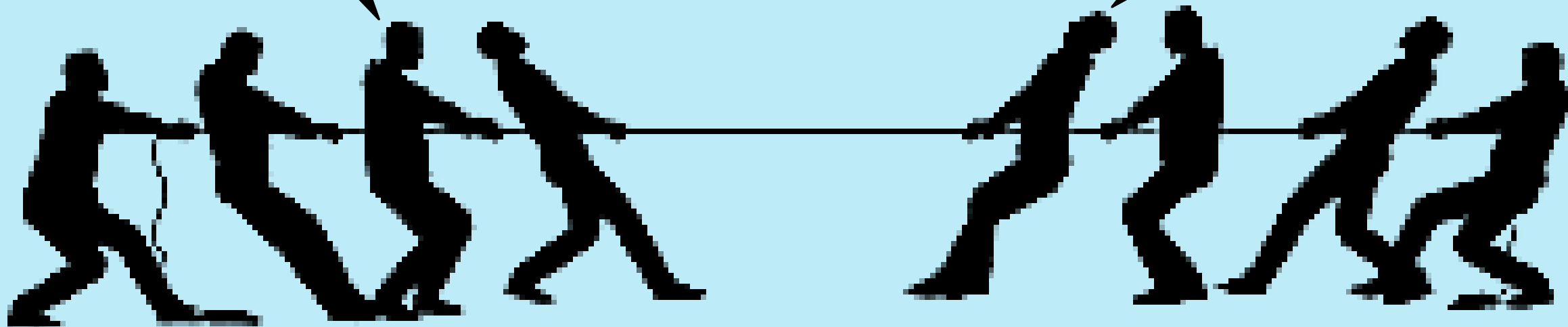
A choice based on **both training and validation ROC** is always more stable

**It is never enough!
No model is good enough for any of us!**



Our model is better!

No, ours is better!!!



THANK YOU!!