- Tree methods
  - Motivations

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  - Tree building process
- Ensembling with trees: Boosting and Randomization

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- Parametric setup is not adapted for all situations : Tree method and other non-parametric are more oriented on rules in order to separate regions of the sample space;
- These methods works for both Regression and Classification;
- Example: Regression tree for Baseball player's salary.

Figure Ri regions

How to select among the p variables / predictors?

1

2

3

Tree methods

- Tree methods
- 2 Ensembling with trees : Boosting and Randomization

- 1 Tree methods
- 2 Ensembling with trees: Boosting and Randomization
  - Bagging : Gradient Boosting algo.

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  - Summary

Bagging: Gradient Boosting algo. Randomisation: Random Forest algo

3V definition :

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• 3V definition :

Bagging: Gradient Boosting algo. Randomisation: Random Forest algo Summary

3 columns table image Yann Le Cun ML cake