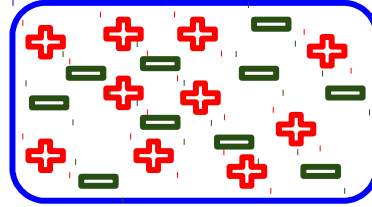
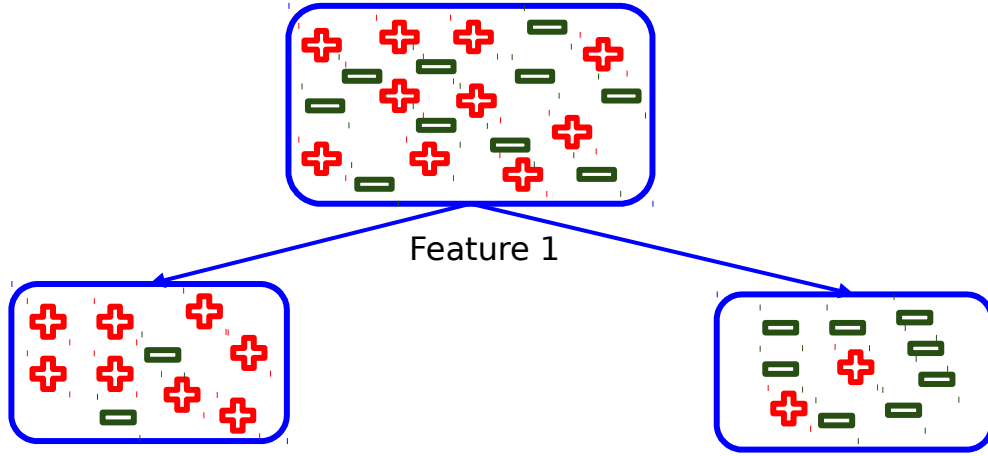


Optimizing performance of Decision Trees

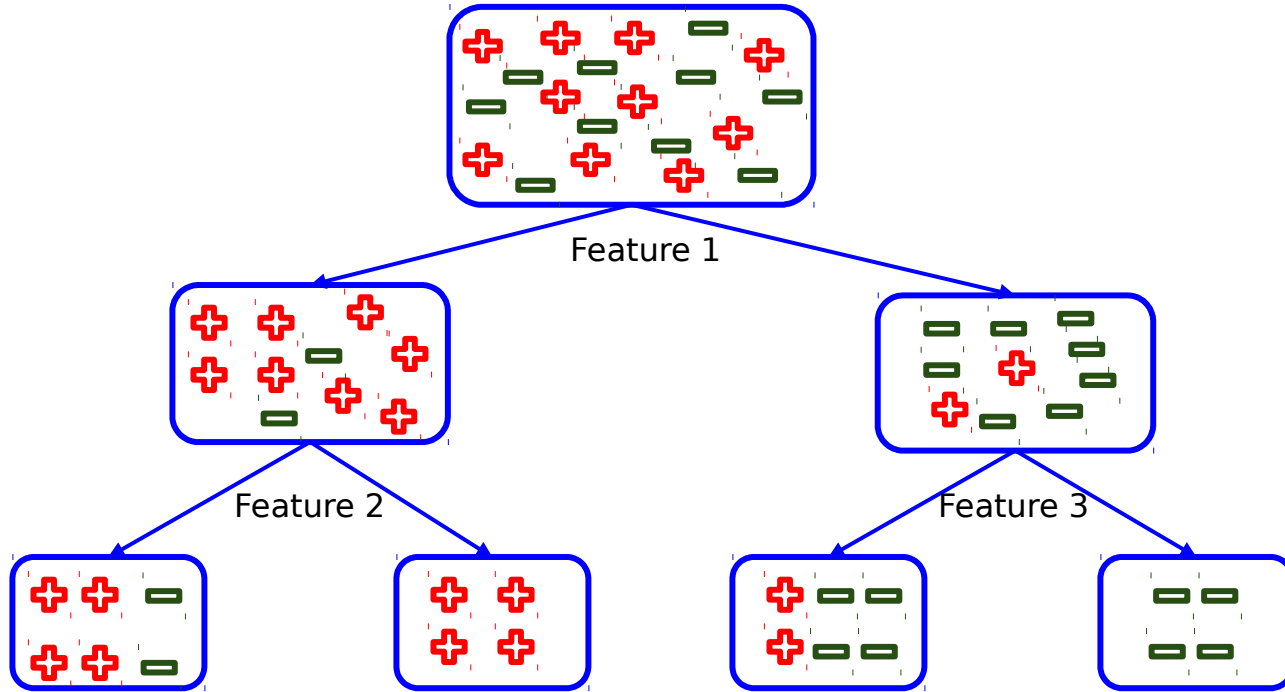
Optimizing performance of Decision Trees



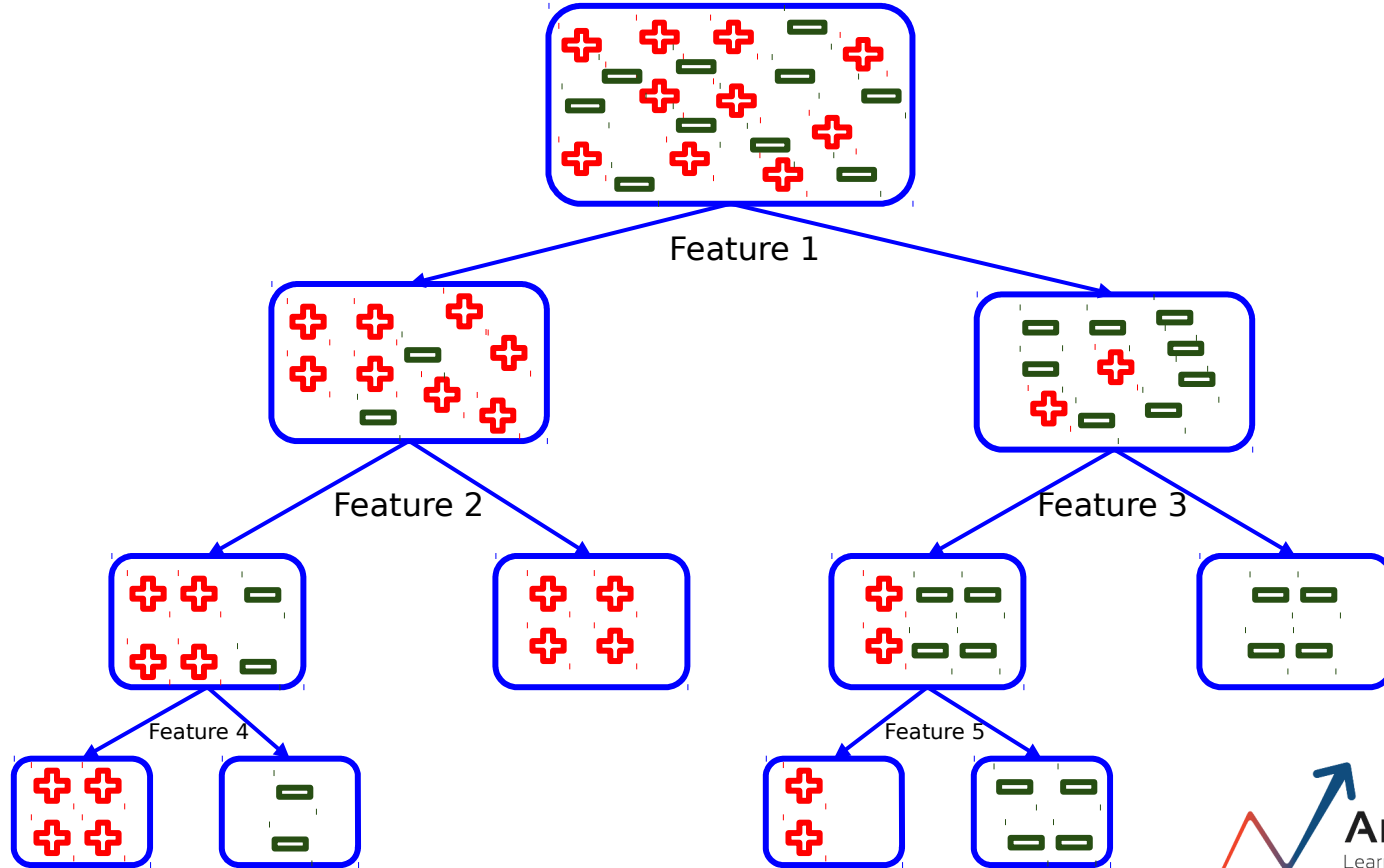
Optimizing performance of Decision Trees



Optimizing performance of Decision Trees



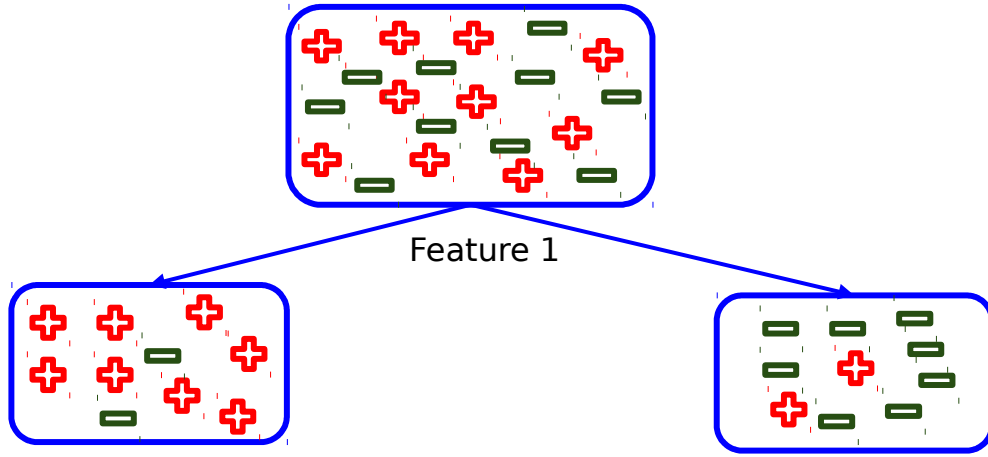
Optimizing performance of Decision Trees



Optimizing performance of Decision Trees

Overfitting

Optimizing performance of Decision Trees



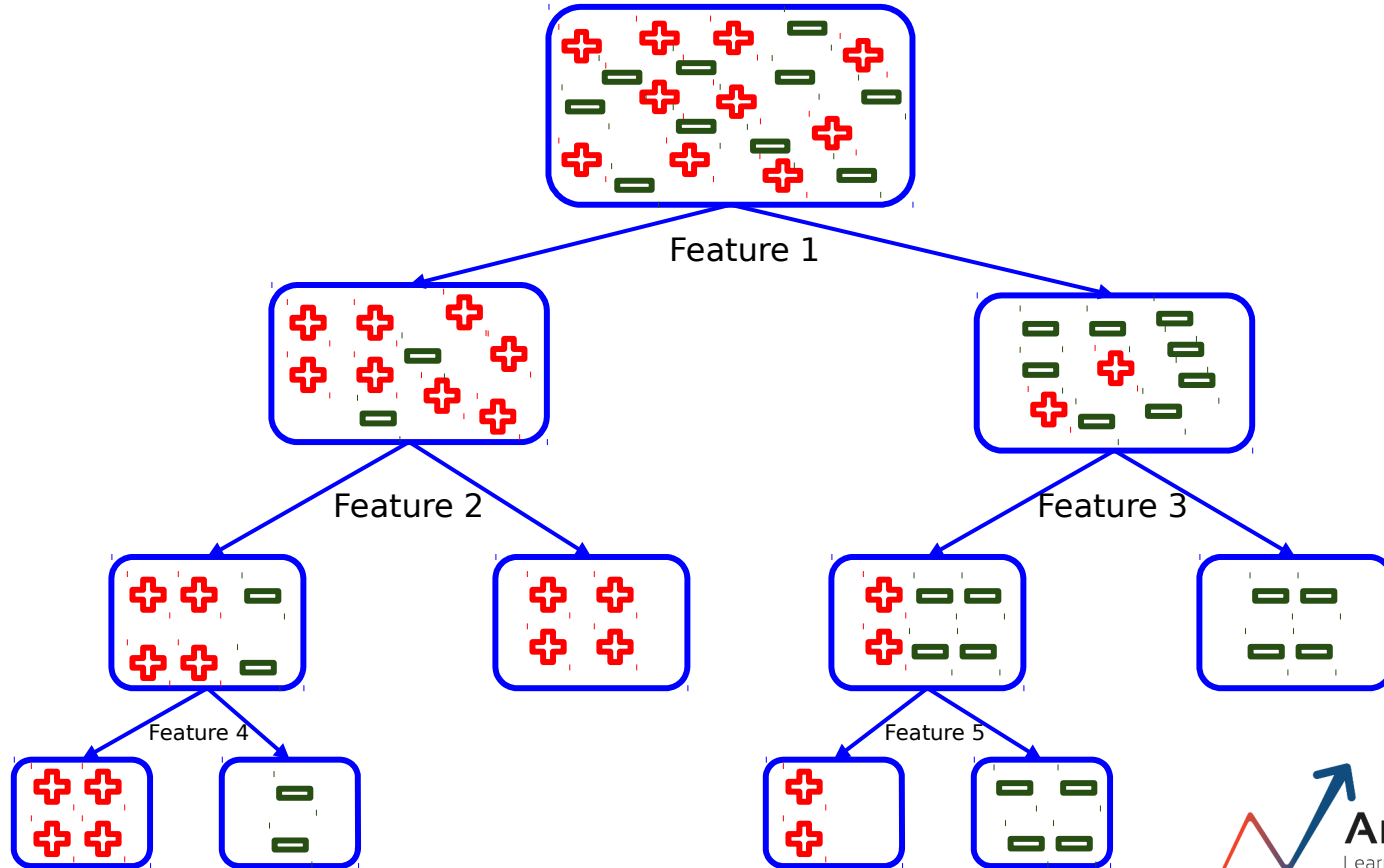
Optimizing performance of Decision Trees

Underfitting

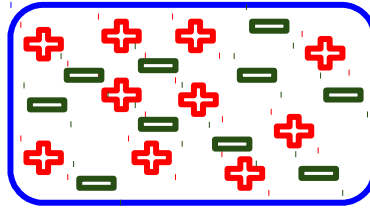
Optimizing performance of Decision Trees

1. Minimum samples for a node split

Optimizing performance of Decision Trees



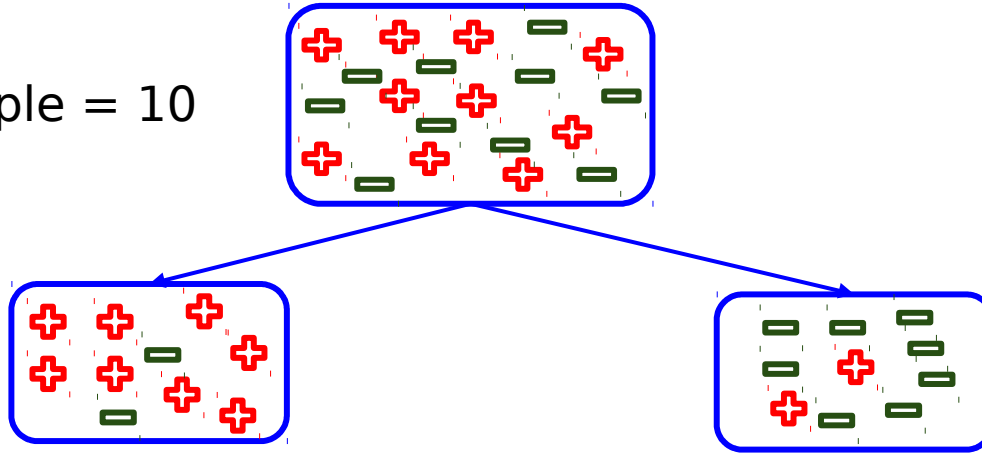
Optimizing performance of Decision Trees



Minimum sample = 10

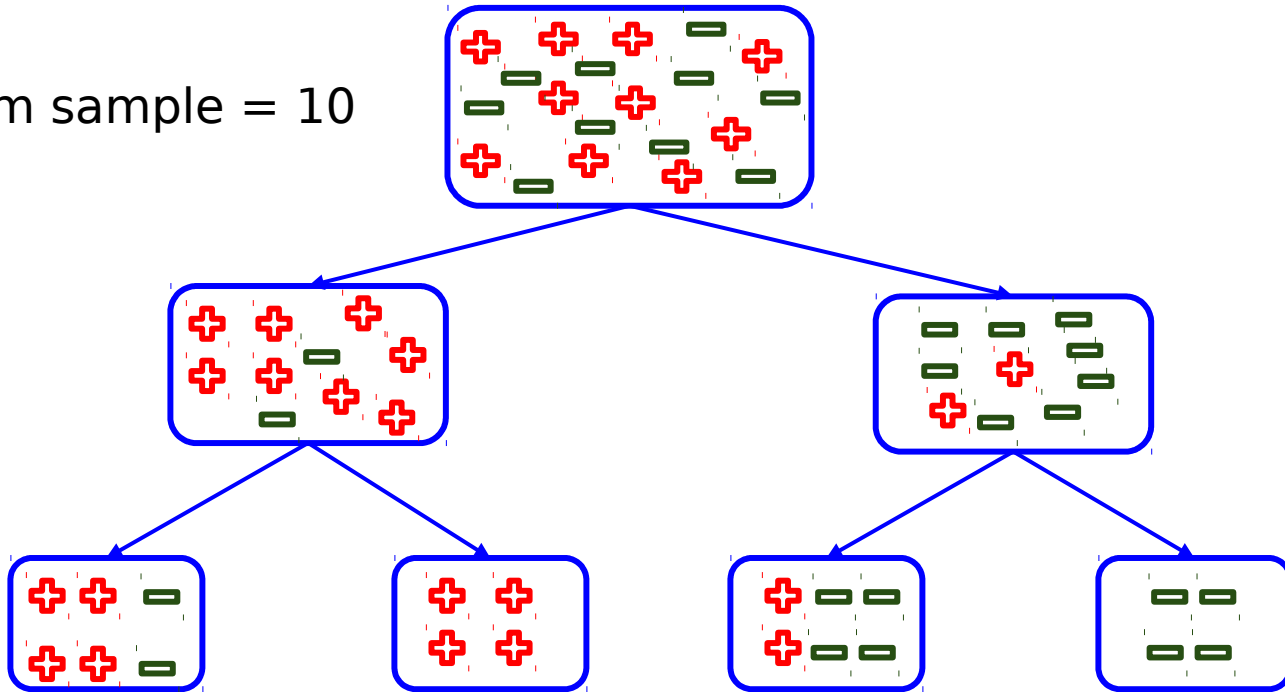
Optimizing performance of Decision Trees

Minimum sample = 10



Optimizing performance of Decision Trees

Minimum sample = 10



Optimizing performance of Decision Trees

1. Minimum samples for a node split
 - a. Higher values controls overfitting

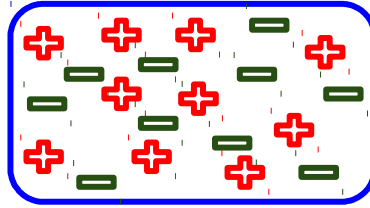
Optimizing performance of Decision Trees

1. Minimum samples for a node split
 - a. Higher values controls overfitting
 - b. Too high values can lead to underfitting

Optimizing performance of Decision Trees

1. Minimum samples for a node split
2. Minimum samples for a terminal node

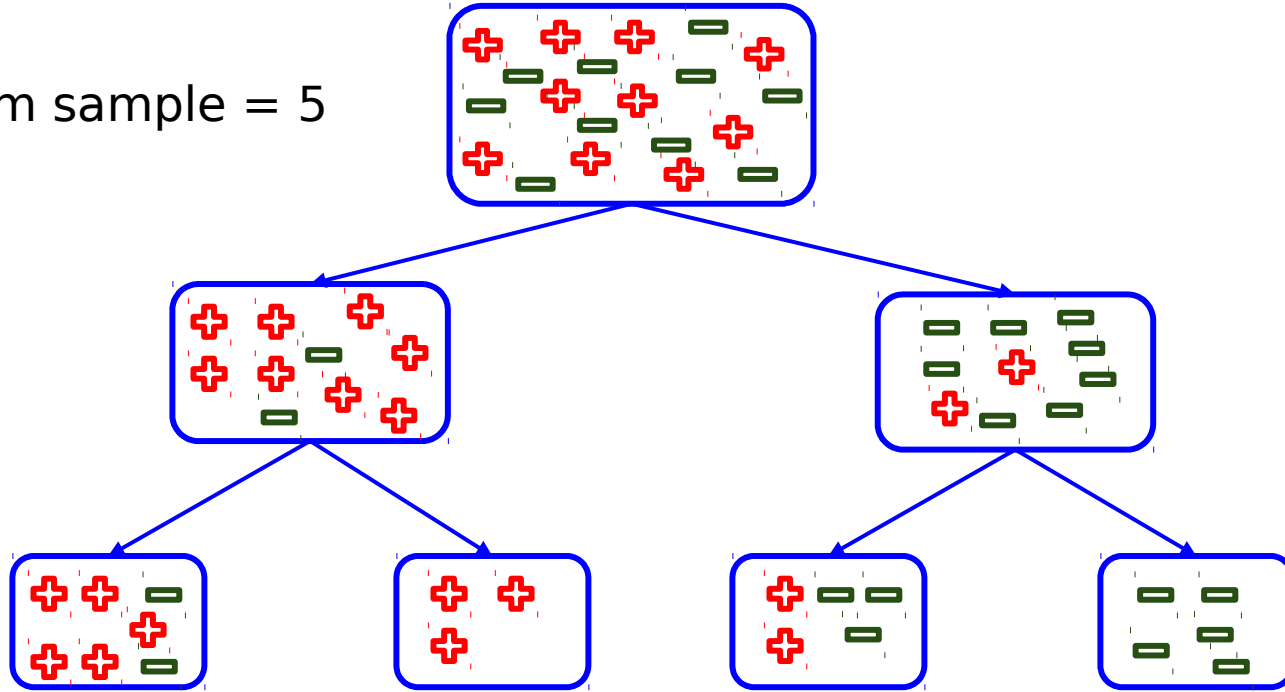
Optimizing performance of Decision Trees



Minimum sample = 5

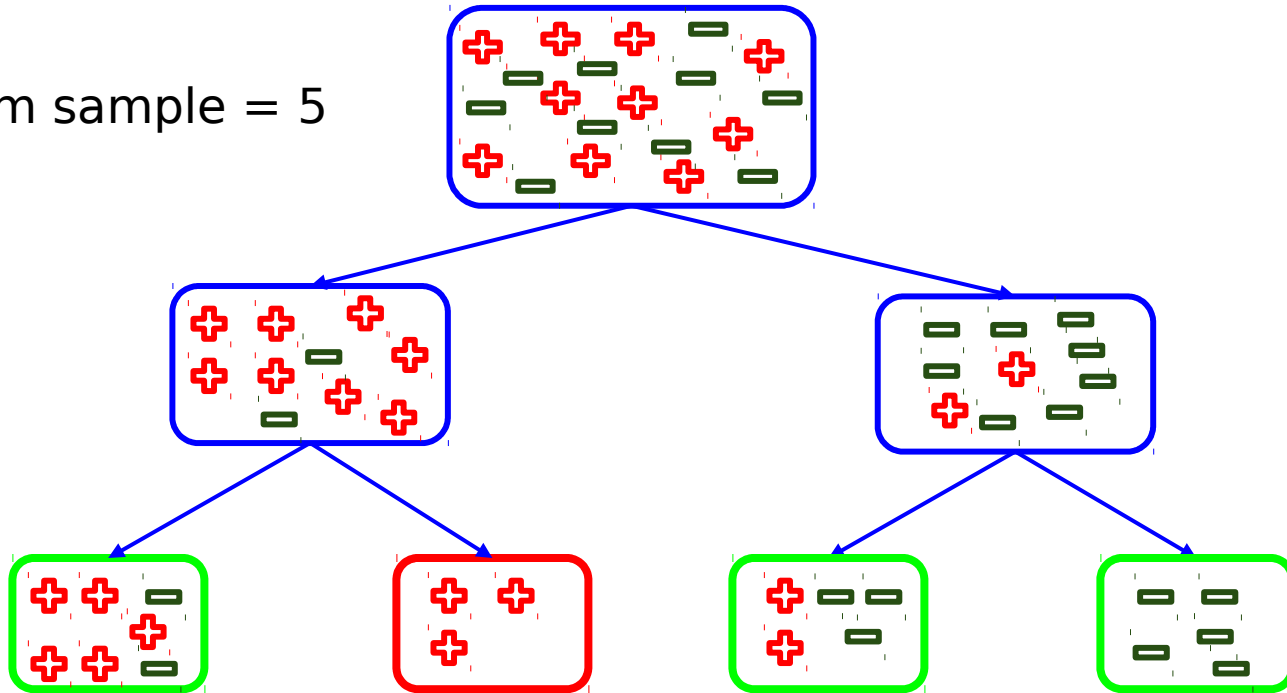
Optimizing performance of Decision Trees

Minimum sample = 5



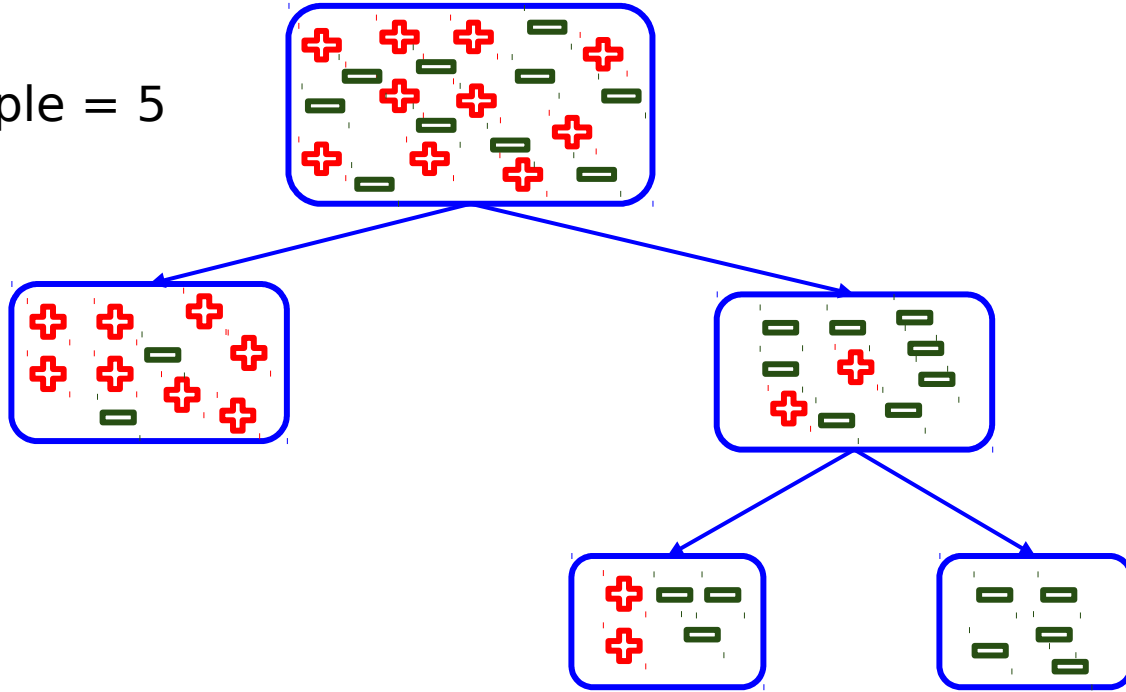
Optimizing performance of Decision Trees

Minimum sample = 5



Optimizing performance of Decision Trees

Minimum sample = 5

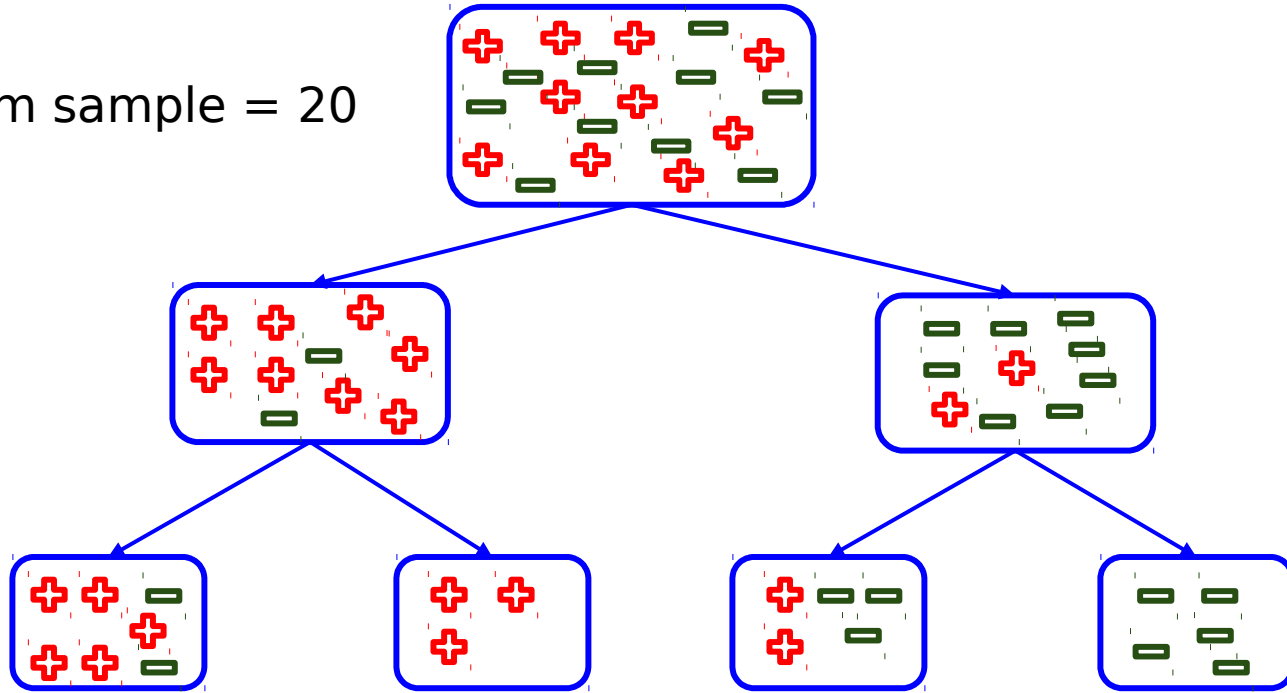


Optimizing performance of Decision Trees

1. Minimum samples for a node split
2. Minimum samples for a terminal node
 - a. Higher value controls overfitting
 - b. Too high values can lead to underfitting

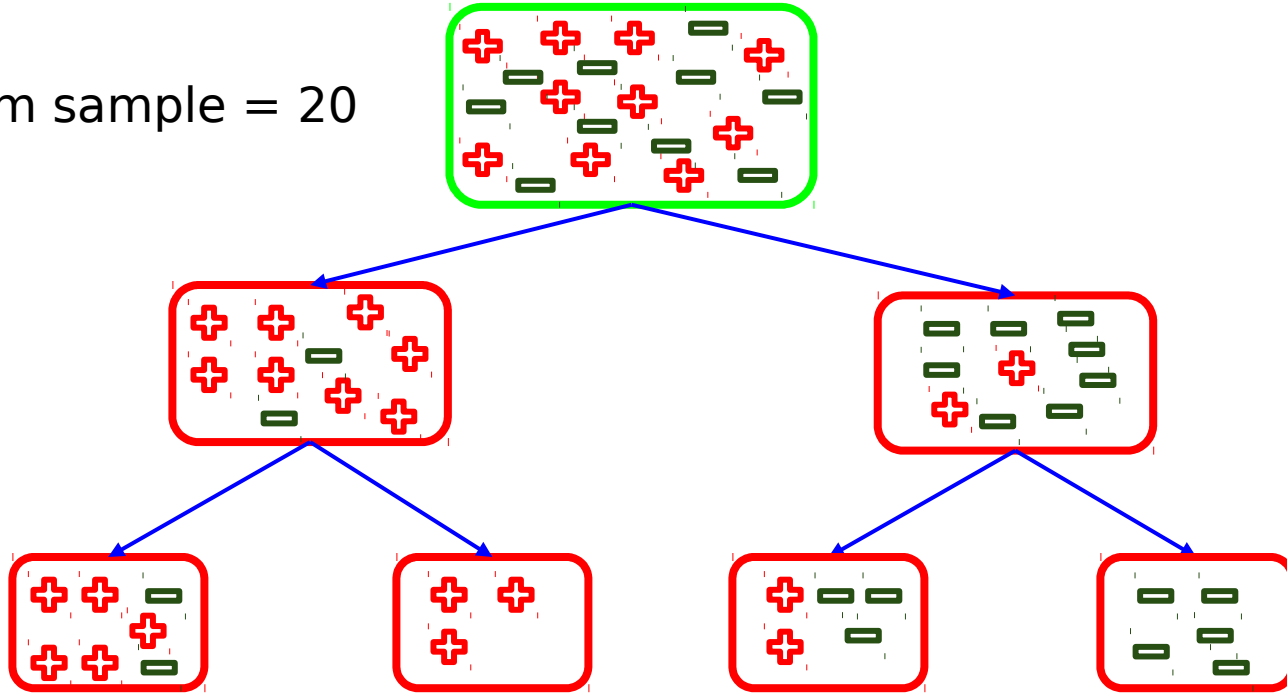
Optimizing performance of Decision Trees

Minimum sample = 20

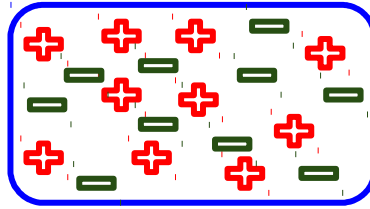


Optimizing performance of Decision Trees

Minimum sample = 20



Optimizing performance of Decision Trees

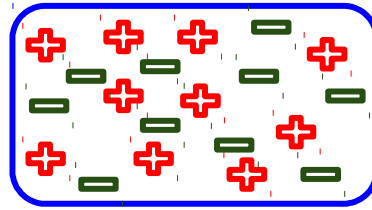


Minimum sample = 20

Optimizing performance of Decision Trees

1. Minimum samples for a node split
2. Minimum samples for a terminal node
3. Maximum depth of tree

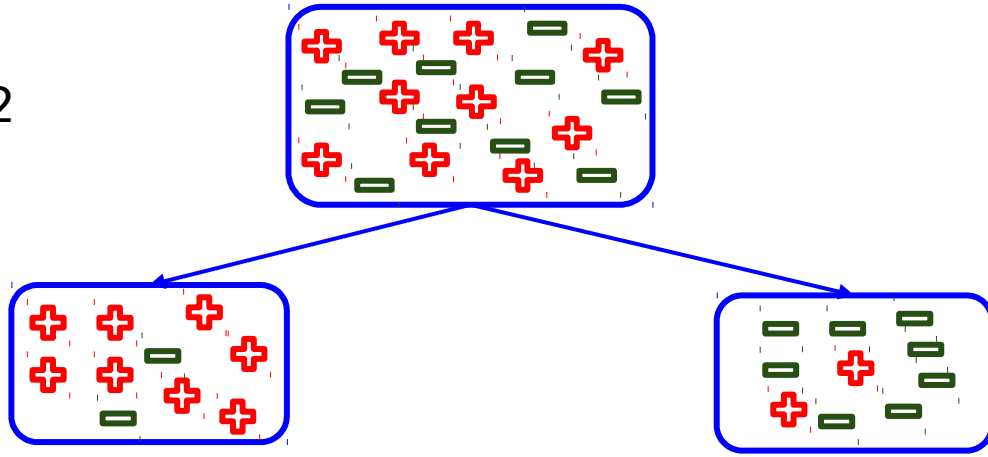
Optimizing performance of Decision Trees



Max Depth = 2

Optimizing performance of Decision Trees

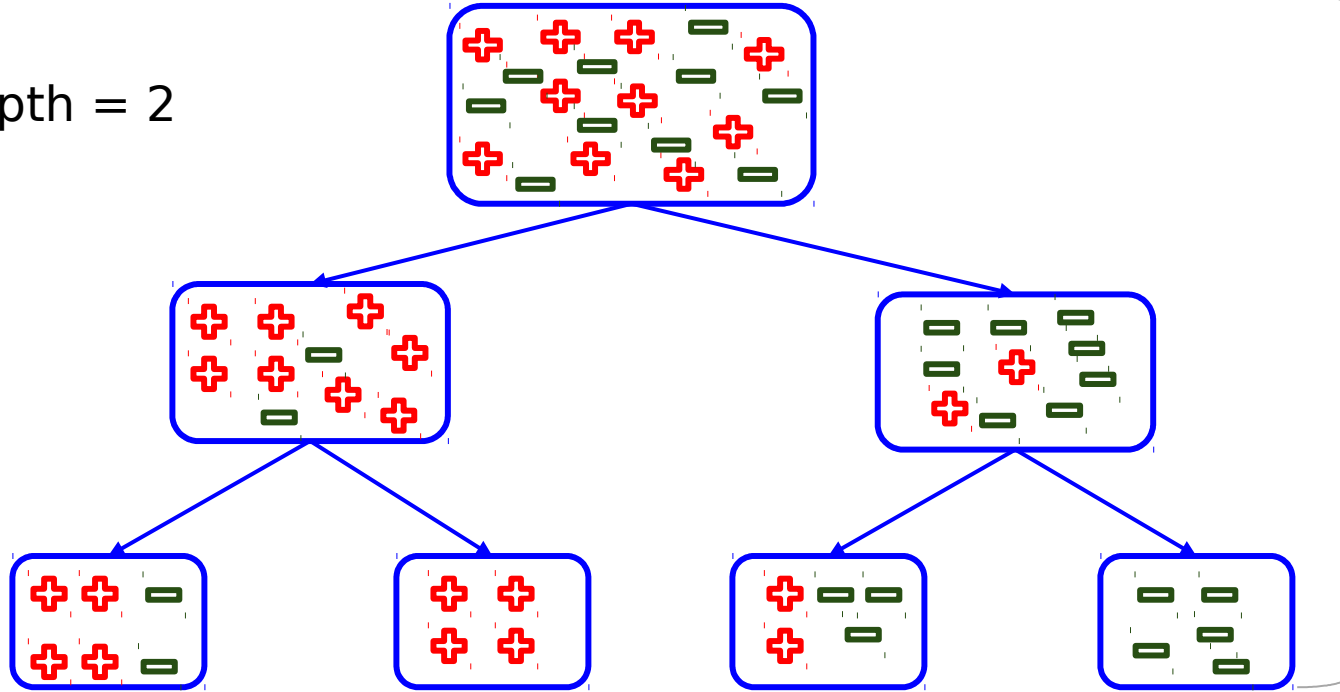
Max Depth = 2



Depth =
1

Optimizing performance of Decision Trees

Max Depth = 2



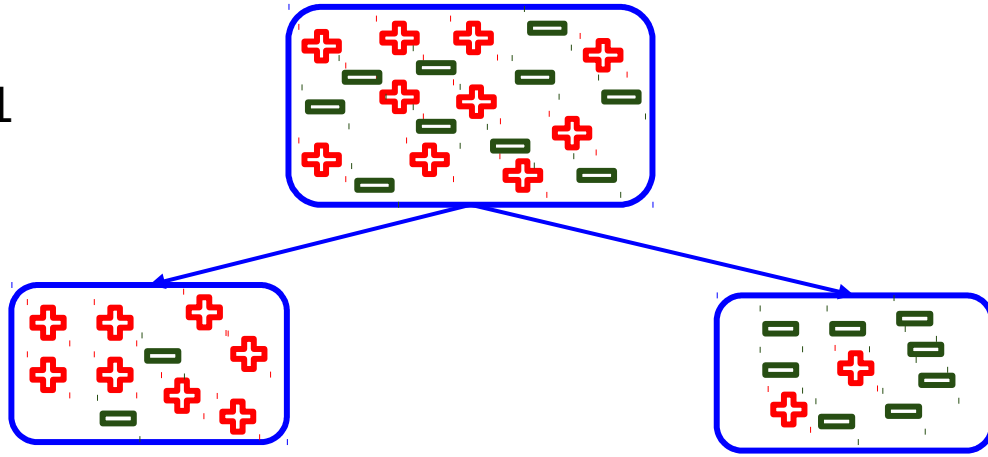
Depth = 2

Optimizing performance of Decision Trees

1. Minimum samples for a node split
2. Minimum samples for a terminal node
3. Maximum depth of tree
 - a. Higher depth can lead to overfitting
 - b. Lower depth can lead to underfitting

Optimizing performance of Decision Trees

Max Depth = 1

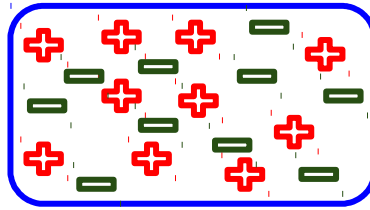


Depth =
1

Optimizing performance of Decision Trees

1. Minimum samples for a node split
2. Minimum samples for a terminal node
3. Maximum depth of tree
4. Maximum number of terminal nodes

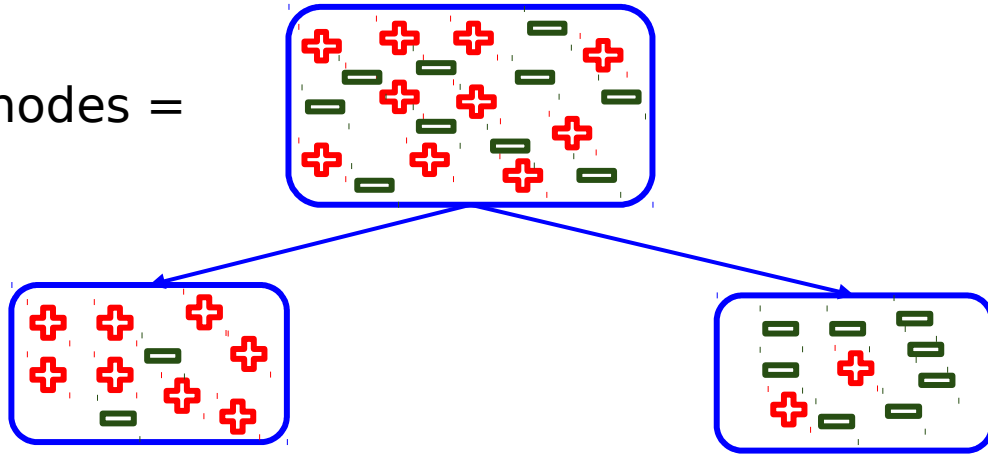
Optimizing performance of Decision Trees



Max Terminal nodes =
2

Optimizing performance of Decision Trees

Max Terminal nodes =
2



Thank
You!