

BOOSTING ALGORITHM – REGRESSION

Ada Boost


XG Boosting

LG Boosting


ADABOOST – SEQUENTIAL LEARNING

- ▶ An AdaBoost regressor is a **meta-estimator** that begins by **fitting** a **regressor** on the **original dataset** and then fits **additional copies** of **the regressor** on the **same dataset** but where the **weights** of **instances are adjusted** according to the **error** of the **current prediction**.

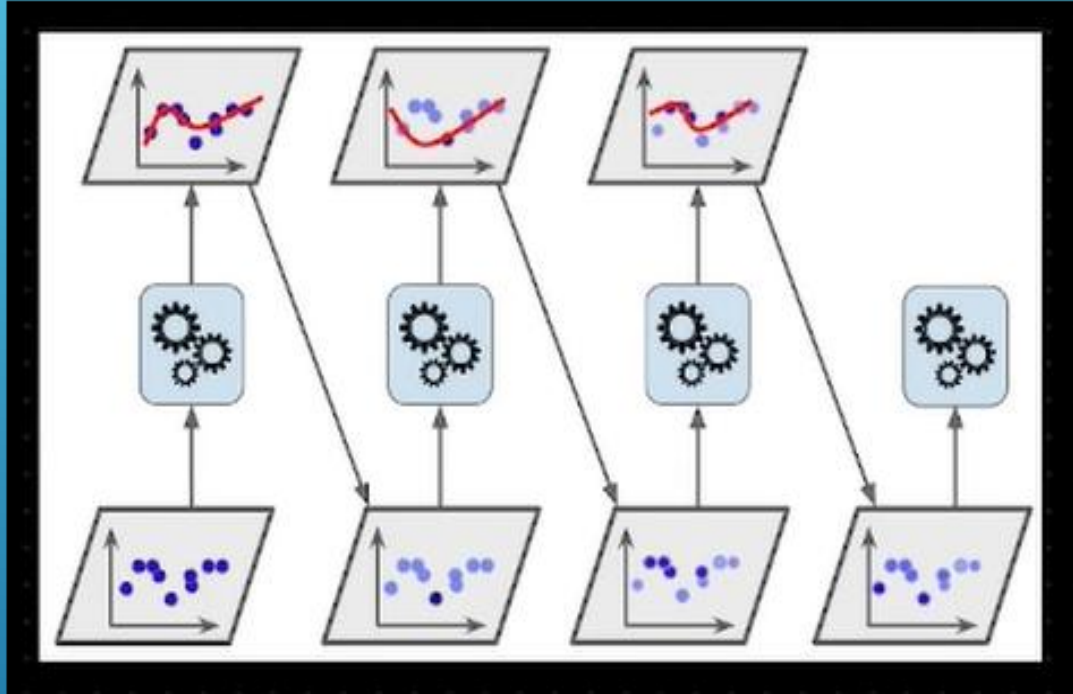
Purpose of AdaBoost

- improve binary classification performance
 - improves prediction accuracy by combining multiple "weak" classifiers into a strong classifier
 - focusing on misclassified data points in each iteration
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- A series of white diagonal lines of varying lengths and thicknesses, located in the bottom right corner of the slide, creating a modern, abstract design element.

Applications of AdaBoost

- face detection
 - object recognition
 - text classification
 - AdaBoost can also be used in other areas of machine learning, such as regression and clustering
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- Several white lines of varying lengths and slopes are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

Misclassified data points transfer into another model



Final model – strong learner (Combination of various weak learners)

