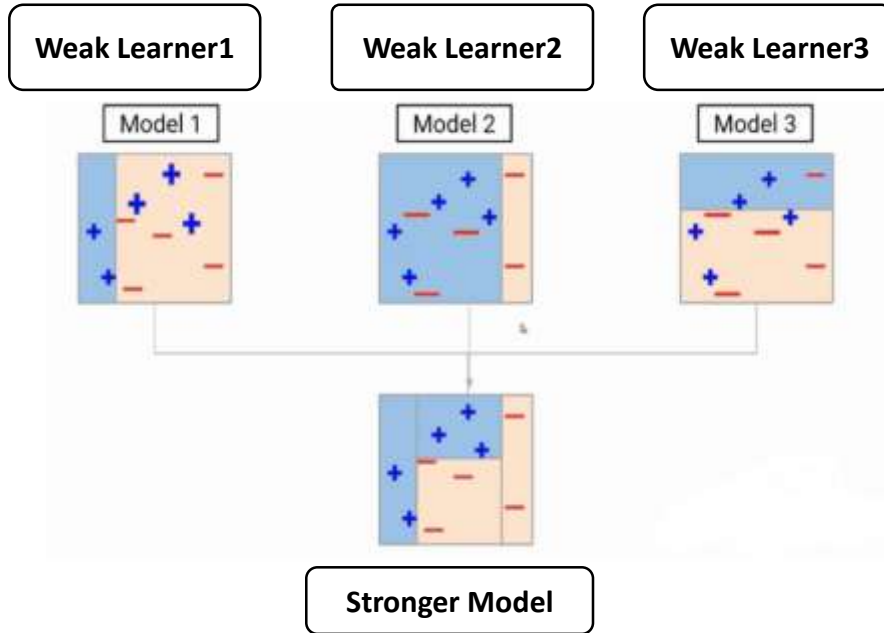


The background of the image is a dark blue gradient. It features a large, faint, circular graphic in the center, resembling a stylized eye or a target, composed of concentric rings and segments. Overlaid on this are numerous white, glowing circuit-like lines and dots, suggesting a digital or technological theme. The text 'AdaBoost Algorithm' is centered within a white rectangular border.

AdaBoost Algorithm

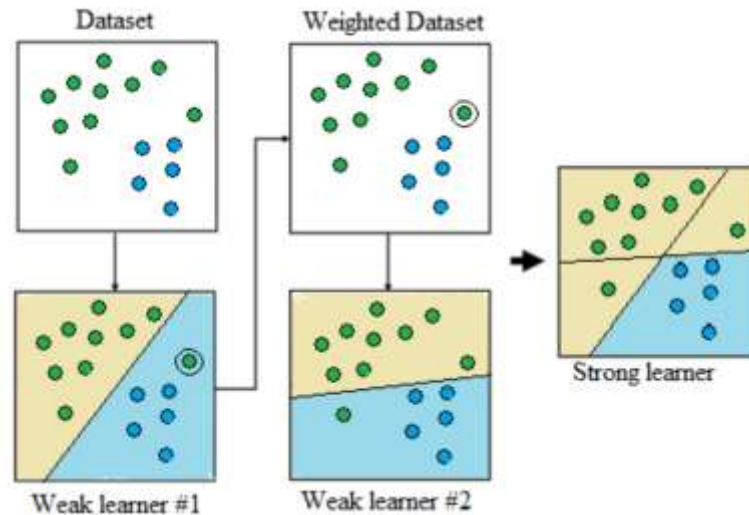
Ada Boost (or) Adaptive Boosting



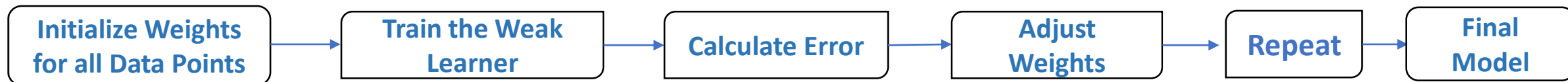
- AdaBoost (Adaptive Boosting) is an ensemble learning method that combines multiple **weak learners** to create a **stronger model**.
- AdaBoost algorithm works by training weak learners in a sequence and focusing on correcting mistakes made in earlier steps

How Does AdaBoost Work?

- The AdaBoost algorithm works by training **weak learners** in a **sequence** and focusing on **correcting mistakes** made in **earlier steps**.



simple breakdown of the process:



AdaBoost Algorithm Parameters

- Number of Weak Learners
- Base Estimator
- Learning Rate
- Loss Function

Advantages of AdaBoost

- ❑ Improved Accuracy
- ❑ Adaptability
- ❑ Ease of Implementation
- ❑ Handles Imbalanced Datasets

Disadvantages of AdaBoost

- ❑ Sensitive to Noisy Data
- ❑ Computationally Intensive
- ❑ Overfitting
- ❑ Limited Flexibility with Weak Learners