Hyperparameter Tuning:
- **GridSearchCV**
- **RandomizedSearchCV**
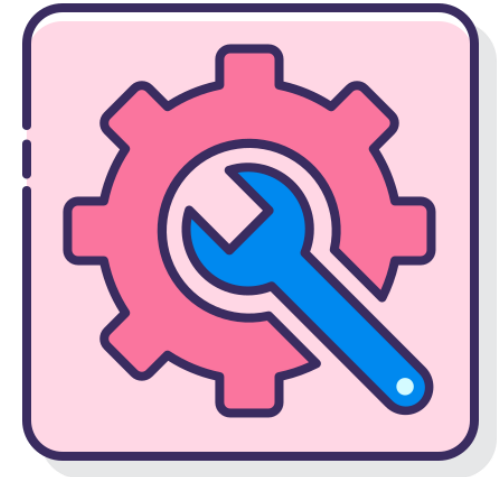
Types of Parameters

Parameters

Model Parameters

These are the parameters of the model that can be determined by training with training data. These can be considered as internal Parameters.

➢ **Weights**
➢ **Bias**

Y = w*X + b

Hyperparameters

Hyperparameters are parameters whose values control the learning process. These are adjustable parameters used to obtain an optimal model. External Parameters.

➢ **Learning rate**
➢ **Number of Epochs**
➢ **n_estimators**

Hyperparameter Tuning
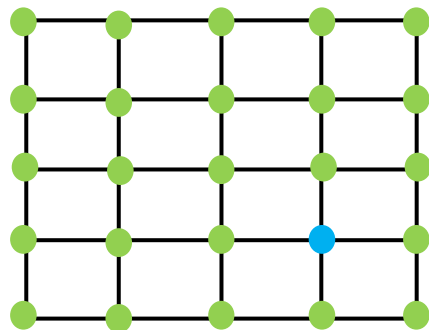

Hyperparameter Tuning

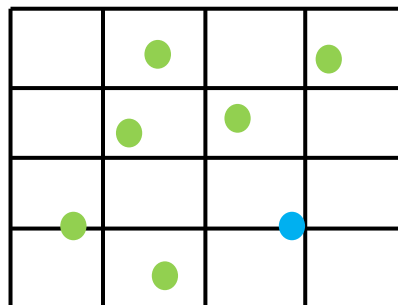Model Training

Hyperparameter Tuning

Hyperparameter Tuning refers to the process of choosing the optimum set of hyperparameters for a Machine Learning model. This process is also called **Hyperparameter Optimization.**

Hyperparameter Tuning Types:

GridSearchCV   RandomizedSeaechCV

Support Vector Classifier:
C: [1,5,10]
kernel: ('linear', 'poly', 'rbf', 'sigmoid')

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