

Implement a classifier using open sourceAim:-

To implement a KNN classifier using Iris dataset

Objective:-

To analysis the Statistical parameters and work flow of the algorithm

Pseudocode / Algorithm:-

1. Install and import the libraries.

2. Load data set.

3. Split the data into training & test sets.

4. Create the KNN classifier.

5. Train the model.

6. Make predictions.

7. Evaluate model.

Observation:-

In this Iris dataset I used k-nearest neighbour algorithm (KNN).

when

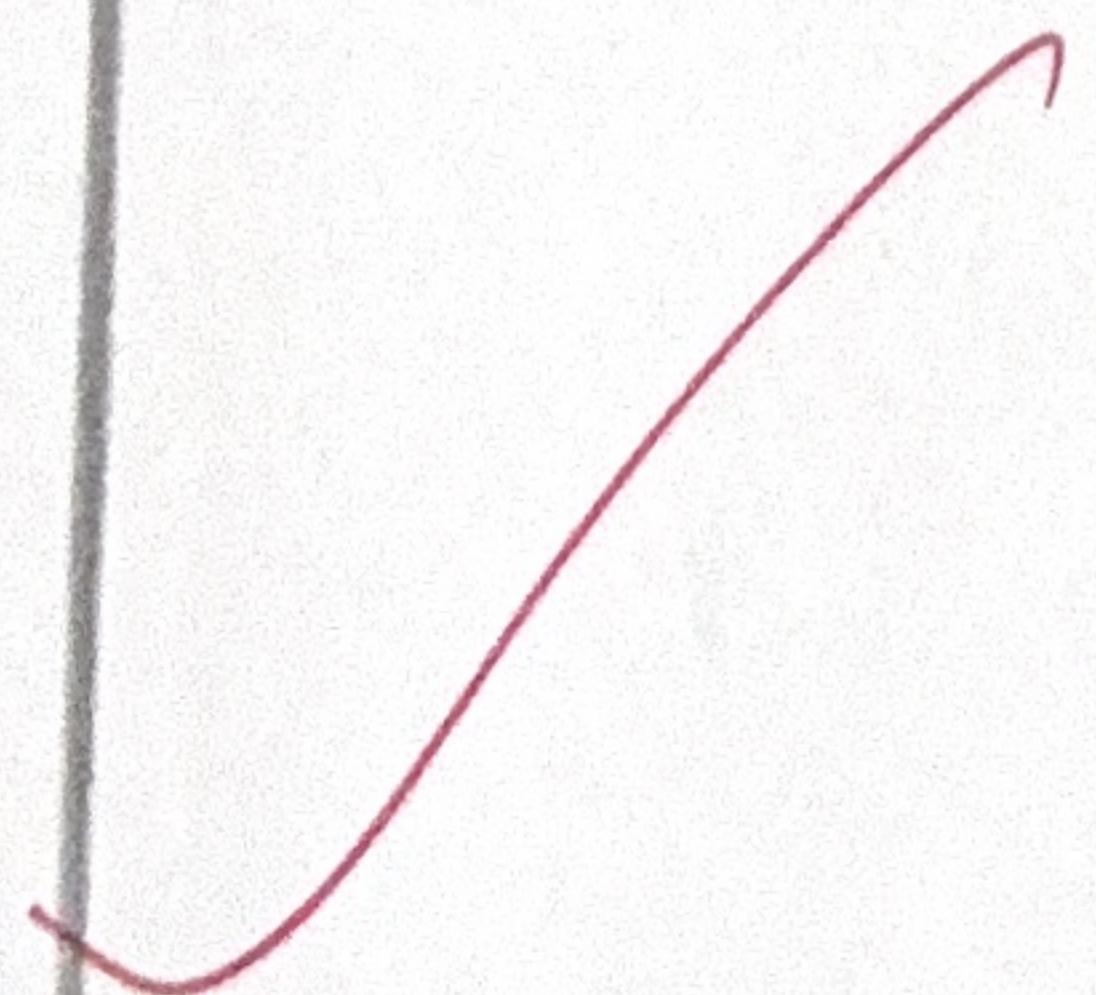
split the data using sklearn

80: 20 ratio

Normalize feature in the data set

sepal length - 4.3 to 7.9 (in cm)

peta length - 1.0 to 6.9 (in cm)



DATASET:-

Iris

Attributes:-

1. sepal length cm
2. sepal width cm
3. petal length cm
4. petal width cm.

matrix / table  $6 \times 150$  data.  
↓      ↓  
col    row

Numerical values in dataset

Pseudocode:

1. Import required libraries:
  - SKLearn, Pandas, numpy, matplotlib
- 2.) Load Iris dataset using SKLearnData
3. Explore dataset:
  - Features: sepal length, sepal width, petal length, petal width
4. ~~Split data:~~  
~~Train 2 test split (80% train)~~
5. Train logistic regression model on train
6. ~~Predict labels on test data~~
7. Evaluate Performance:
  - accuracy

Result: SVM classifier is successfully implemented and tested using an open source (tiláric) dataset

accuracy 0.99

macro avg 0.99

weighted avg 0.99

~~etc, etc~~