

Test and Score - Orange

Cross validation

Number of folds: 5

Stratified

Cross validation by feature

Random sampling

Repeat train/test: 10

Training set size: 66 %

Stratified

Leave one out

Test on train data

Test on test data

Evaluation results for target (None, show average over classes)

Model	AUC	CA	F1	Prec	Recall	MCC
Logistic Regression	0.997	0.953	0.953	0.954	0.953	0.930

Compare models by: Area under ROC curve Negligible diff.: 0.1

Logistic ...

Logistic Regression

Table shows probabilities that the score for the model in the row is higher than that of the model in the column. Small numbers show the probability that the difference is negligible.

Predictions - Orange

Show probabilities for Classes in data

Show classification errors

Restore Original Order

	Logistic Regression	error	iris	sepal length	sepal width	petal length	petal width
1	0.98 : 0.02 : 0.00 → Iris-setosa	0.020	Iris-setosa	5.1	3.7	1.5	0.4
2	0.16 : 0.84 : 0.00 → Iris-versicolor	0.160	Iris-versicolor	4.9	2.4	3.3	1.0
3	0.00 : 0.02 : 0.98 → Iris-virginica	0.016	Iris-virginica	6.7	3.3	5.7	2.5
4	0.00 : 0.12 : 0.88 → Iris-virginica	0.122	Iris-virginica	7.2	3.0	5.8	1.6
5	0.97 : 0.03 : 0.00 → Iris-setosa	0.032	Iris-setosa	4.9	3.1	1.5	0.1
6	0.00 : 0.03 : 0.97 → Iris-virginica	0.025	Iris-virginica	6.7	3.1	5.6	2.4
7	0.97 : 0.03 : 0.00 → Iris-setosa	0.029	Iris-setosa	4.9	3.0	1.4	0.2
8	0.00 : 0.66 : 0.34 → Iris-versicolor	0.339	Iris-versicolor	6.9	3.1	4.9	1.5
9	0.00 : 0.03 : 0.97 → Iris-virginica	0.026	Iris-virginica	7.4	2.8	6.1	1.9
10	0.00 : 0.11 : 0.89 → Iris-virginica	0.109	Iris-virginica	6.3	2.9	5.6	1.8
11	0.02 : 0.94 : 0.04 → Iris-versicolor	0.064	Iris-versicolor	5.7	2.8	4.1	1.3
12	0.00 : 0.14 : 0.86 → Iris-virginica	0.143	Iris-virginica	6.5	3.0	5.5	1.8
13	0.00 : 0.90 : 0.10 → Iris-versicolor	0.102	Iris-versicolor	6.3	2.3	4.4	1.3
14	0.01 : 0.93 : 0.06 → Iris-versicolor	0.072	Iris-versicolor	6.4	2.9	4.3	1.3
15	0.00 : 0.29 : 0.71 → Iris-virginica	0.289	Iris-virginica	5.6	2.8	4.9	2.0
16	0.00 : 0.31 : 0.69 → Iris-virginica	0.313	Iris-virginica	5.9	3.0	5.1	1.8
17	0.95 : 0.05 : 0.00 → Iris-setosa	0.053	Iris-setosa	5.4	3.4	1.7	0.2
18	0.02 : 0.95 : 0.03 → Iris-versicolor	0.052	Iris-versicolor	6.1	2.8	4.0	1.3
19	0.01 : 0.69 : 0.31 → Iris-versicolor	0.695	Iris-virginica	4.9	2.5	4.5	1.7
20	0.99 : 0.01 : 0.00 → Iris-setosa	0.012	Iris-setosa	5.8	4.0	1.2	0.2
21	0.02 : 0.95 : 0.03 → Iris-versicolor	0.048	Iris-versicolor	5.8	2.6	4.0	1.2
22	0.00 : 0.03 : 0.97 → Iris-virginica	0.026	Iris-virginica	7.1	3.0	5.9	2.1

Show performance scores

Target class: (Average over classes)

Model	AUC	CA	F1	Prec	Recall	MCC
Logistic Regression	0.994	0.955	0.955	0.960	0.955	0.933

```
# Import library yang diperlukan
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

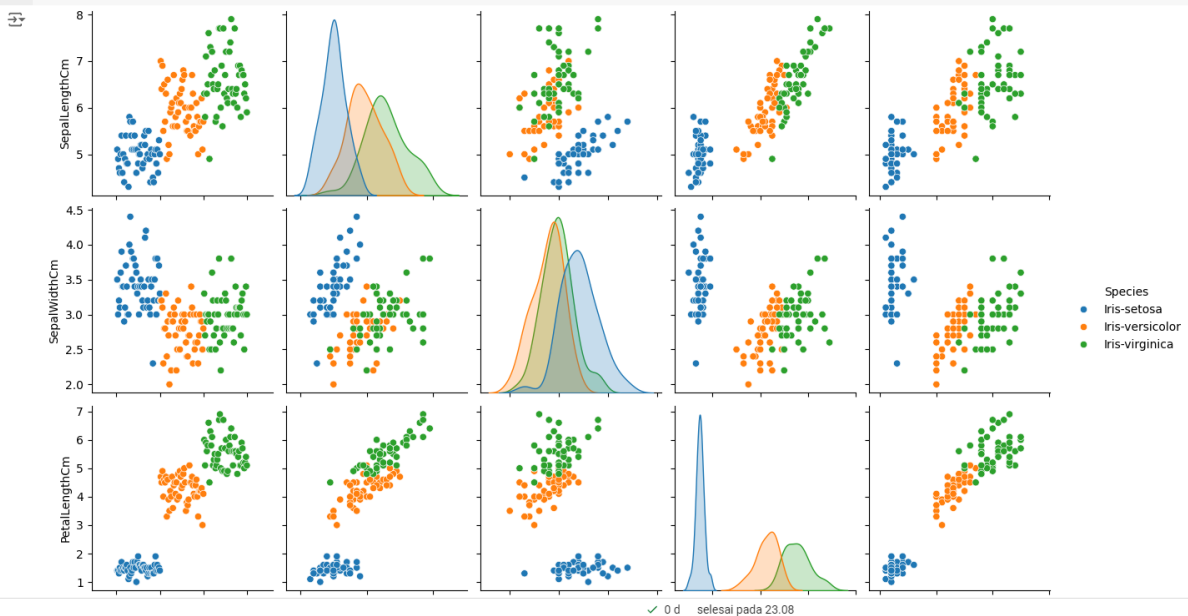
# Membaca dataset dari file Iris.csv
df = pd.read_csv('Iris.csv')

# Melihat 5 data teratas
print(df.head())
```

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa

Dataset Iris.csv berisi fitur panjang dan lebar sepal serta petal untuk mengklasifikasikan spesies bunga iris, yang dapat dianalisis lebih lanjut untuk membedakan antara Iris-setosa, Iris-versicolor, dan Iris-virginica.

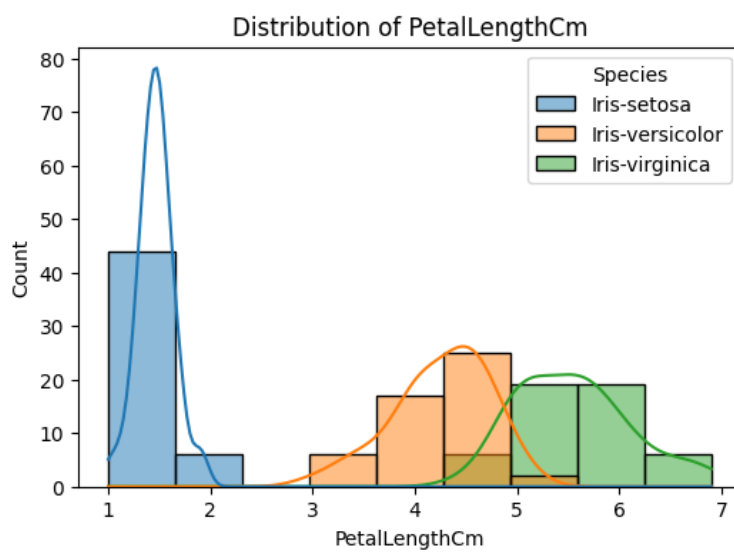
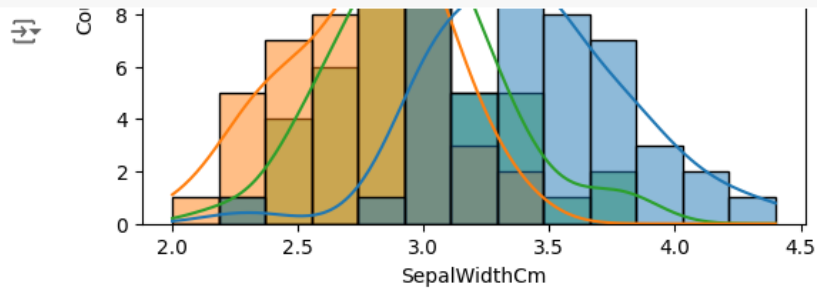
```
# Visualisasi pairplot untuk melihat hubungan antar variabel
sns.pairplot(df, hue='Species')
plt.show()
```



```

✓ [12] # Visualisasi distribusi dari setiap fitur
2d for column in df.columns[1:-1]: # Menghindari kolom pertama yang biasanya ID
plt.figure(figsize=(6, 4))
sns.histplot(data=df, x=column, hue='Species', kde=True)
plt.title(f'Distribution of {column}')
plt.show()

```



Distribution of PetalWidthCm

```

# Visualisasi korelasi antar fitur dengan heatmap
plt.figure(figsize=(8, 6))
sns.heatmap(df[numeric_columns].corr(), annot=True, cmap='coolwarm', linewidths=0.5)
plt.title('Correlation Matrix')
plt.show()

```

