Data Visualization Portfolio - Iris Flower Classification

Project Objective

The goal of this project is to explore relationships among different flower measurements in the Iris dataset using Python's data visualization tools. The analysis reveals patterns between petal/sepal dimensions and species classification.

Dataset Overview

Filename: mock_iris_dataset.csv

Records: 5 (sample dataset)

Features:

- Sepal Length
- Sepal Width
- Petal Length
- Petal Width
- Species

Tools & Technologies

Python - Data handling and visualization

Pandas - Data manipulation

Seaborn & Matplotlib - Visualizations

Visualizations & Insights

Pairplot

Plots relationships among Sepal Length, Sepal Width, Petal Length, and Petal Width.

Colored by species to highlight classification separation.

Petal length and width offer clearer separation among species than sepal measurements.

Key Learnings & Conclusions

Petal measurements are key discriminators among species.

Visualization helps identify species clusters.

Simple visual tools like pairplots are effective for exploratory analysis.

Next Steps

Expand analysis using the full Iris dataset.

Apply classification algorithms to automate species identification.

Deploy insights in educational or research dashboards.

Share findings on GitHub, LinkedIn, or personal website.

Portfolio by NARMATHA A