

File Edit Selection View Go Run Terminal Help ← → Q advanced-ml-techniques - main.ipynb W View Changelog X

Explorer ... main.ipynb X question.md 2. U image.png U ML470_S2_Diabetes_Data_Concept.xlsx U

Open Editors portal code > day2 > concept > 2. ML470_Sprint02_Support_Vector_Machines_Concept_Q2 > main.ipynb > assess_outliers(+ Code + Markdown | Run All | Restart | Clear All Outputs | Jupyter Variables | Outlinevenv (Python 3.12.10)

advanced-ml-techniques

- > .venv
- > cheatsheets
- < notes
- < day1
- > resources
- < session1.md
- > day2
- < portal code
- < day1
- < day2
- < concept
- > 1. ML470_Sprint02_Support_Ve...
- < 2. ML470_Sprint02_Support_Ve...
- < image.png
- < main.ipynb
- < ML470_S2_Diabetes_Data_Co...
- < question.md
- < 3. ML470_Sprint02_Support_Vect...
- < practice
- < syllabus
- < .gitignore
- < readme.md

def assess_outliers(data, title):
 features = ['Glucose', 'BMI', 'Age', 'Insulin']

 plt.figure(figsize=(12, 5))
 sns.boxplot(data=data[features])
 plt.title(title, fontsize=14)
 plt.xticks(rotation=45)
 plt.tight_layout()
 plt.show()

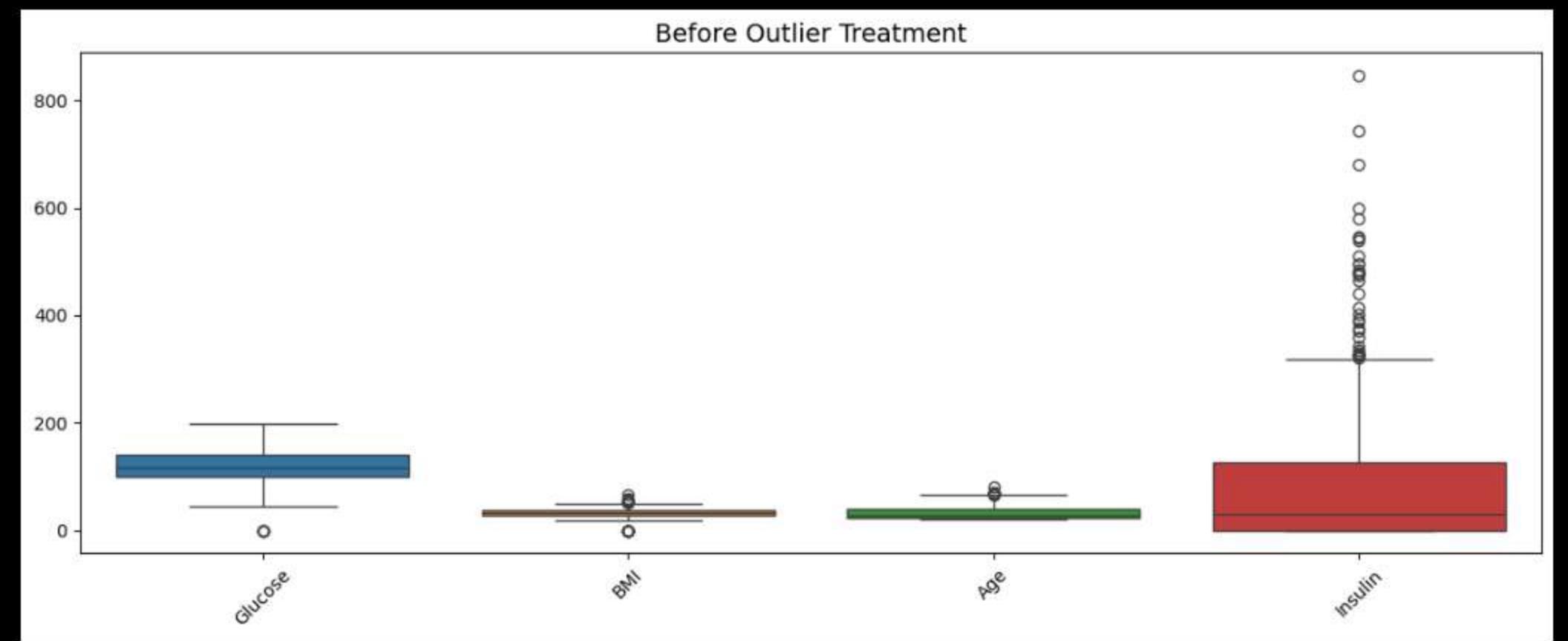
[14] ✓ 0.0s Python

print("Visualization 1: Before Outlier Treatment")
assess_outliers(data , "Before Outlier Treatment")

[15] ✓ 0.2s Python

... Visualization 1: Before Outlier Treatment

Before Outlier Treatment



25°C Partly cloudy

Search

W

ENG IN

09:23 27-12-2025

File Edit Selection View Go Run Terminal Help ← → Q advanced-ml-techniques - main.ipynb W View Changelog X

Explorer ... main.ipynb question.md image.png ML470_S2_Diabetes_Data_Concept.xlsx

Open Editors main.ipynb portal code\day2\concept\2. ML470_Sprint02_Support_Vector_Machines_Concept_Q2\main.ipynb assess_outliers()

Code + Markdown | Run All Restart Clear All Outputs Jupyter Variables Outlinevenv (Python 3.12.10)

advanced-ml-techniques

- .venv
- cheatsheets
- notes
- day1
 - resources
 - session1.md
- day2
- portal code
 - day1
 - day2
 - concept
 - 1. ML470_Sprint02_Support_Ve...
 - 2. ML470_Sprint02_Support_Ve...
 - image.png
 - main.ipynb
 - ML470_S2_Diabetes_Data_Co...
 - question.md
 - 3. ML470_Sprint02_Support_Vect...
- practice
- syllabus
- .gitignore
- readme.md

def treat_outliers(data):
 df = data.copy()
 features = ['Glucose', 'BMI', 'Age', 'Insulin']

 for col in features:
 Q1 = df[col].quantile(0.25)
 Q3 = df[col].quantile(0.75)
 IQR = Q3 - Q1

 lower = Q1 - 1.5 * IQR
 upper = Q3 + 1.5 * IQR

 df[col] = df[col].clip(lower, upper)

 return df

[17] ✓ 0.0s

treated_data = treat_outliers(data)

[18] ✓ 0.0s

assess_outliers(
 treated_data,
 title="Boxplot after Outlier Treatment"
)

[19] ✓ 0.3s

Boxplot after Outlier Treatment

Outline Timeline

master* Launchpad Git Graph Spaces: 4 Cell 7 of 7 Go Live Free - Upgrade Now Windsurf - Settings Prettier