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25/06/2024

Goals

25/06/2024

- Primary goal: Determine which players on the Detroit Pistons are valuable after 1 season of play.
- Secondary goals:
  - Understand the data and perform analytics on its specifications and data insights.
  - Perform basic statistical modeling on the data.
  - Use neural nets like MLP, ARIMA, and LSTM to predict what to do with the players.

Key Features

25/06/2024

- Collect and analyze data on Detroit Pistons players.
- Perform statistical modeling and analysis on the data.
- Use neural networks like MLP, ARIMA, and LSTM for player predictions.
- Generate insights and analysis based on the data.

Analytics

25/06/2024
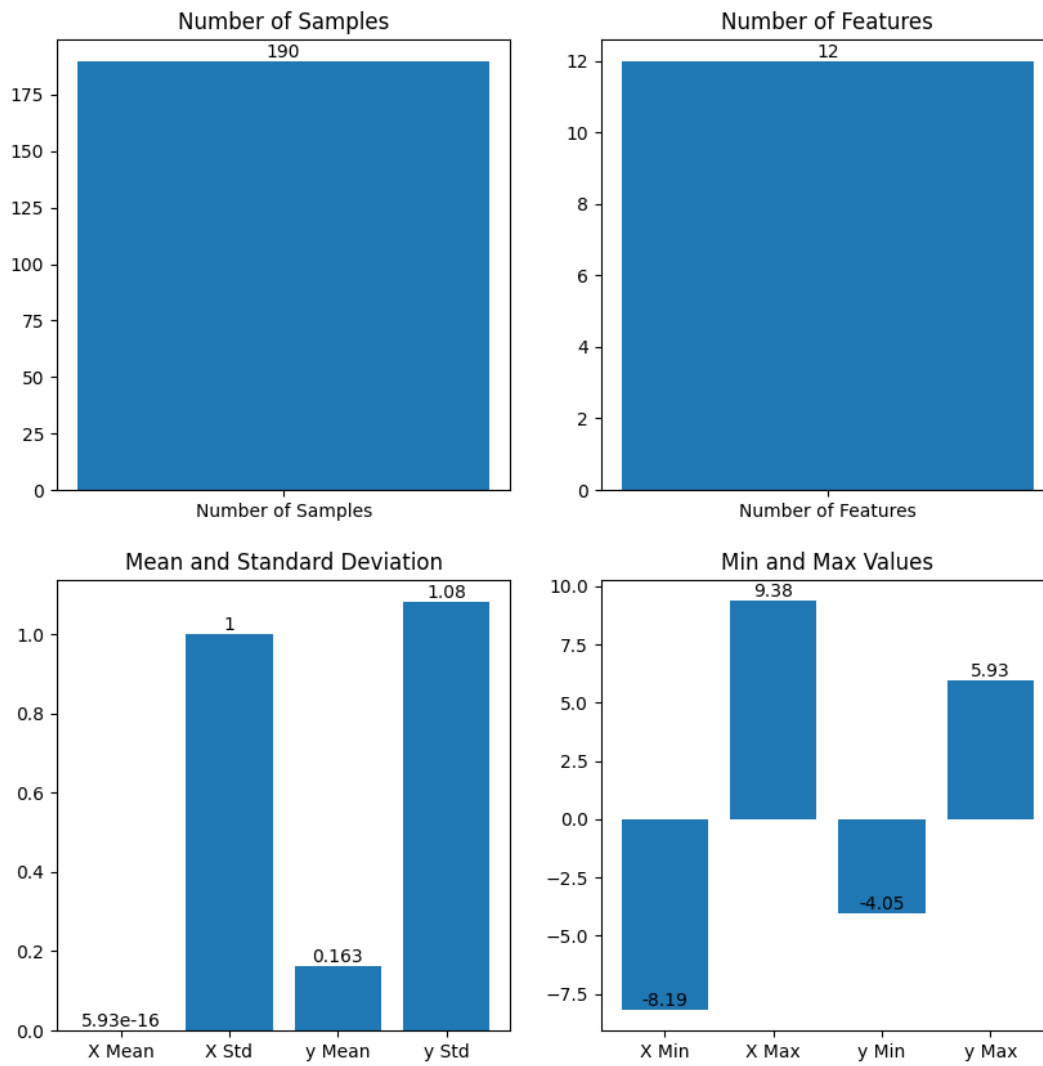
![Graph](data/graphs/analytics.png)

Data Specifications:
- Original DataFrame: Entries=13210, Unique Players=2377
- Filtered DataFrame: Entries=950, Unique Players=190
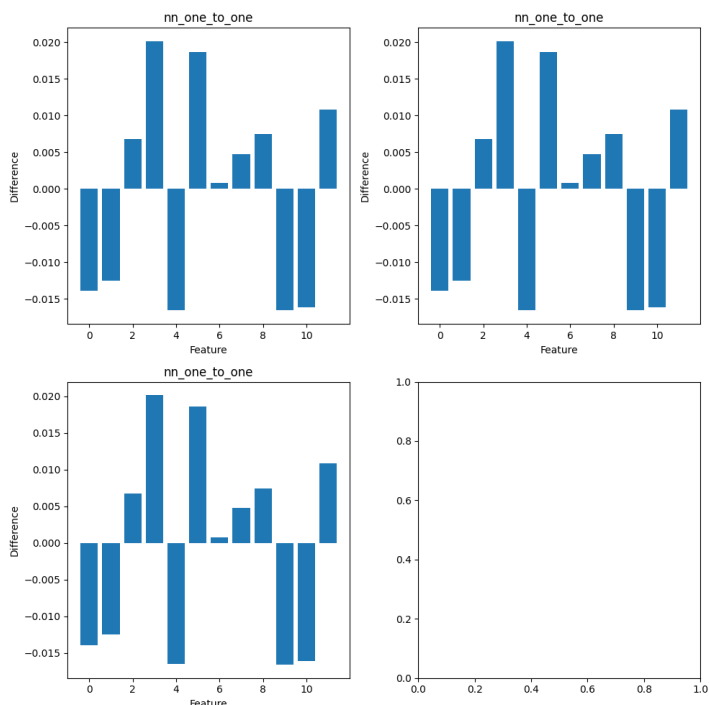
Insights and Analysis:
- [Insight 1]
- [Insight 2]
- [Insight 3]

1. The graph below demonstates the basic analytics of the NBA dataset:

Number of Samples — 190

Number of Features — 12

Mean and Standard Deviation
- X Mean: 5.93e-16
- X Std: 1
- y Mean: 0.163
- y Std: 1.08

Min and Max Values
- X Min: -8.19
- X Max: 9.38
- y Min: -4.05
- y Max: 5.93

2. The visualisations below show model prediction comparisons:

3. The graphs below show further analysis via PCA, showing dataset sample relationships.

PCA Plot
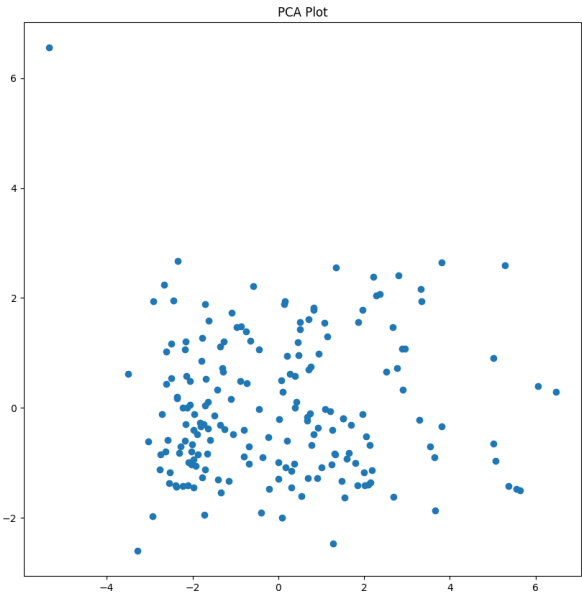
4. The table below shows the last 7 days of git commits:

	Message	Date
0	0.3.8-2024-23-06: Updated use_models.py to wo...	2024-06-23 23:46:13-05:00
1	0.3.7-2024-22-06: Updated nn to include many-t...	2024-06-22 02:22:07-05:00
2	0.3.6-2024-21-06: Updated dataset and improved...	2024-06-21 00:50:32-05:00
3	0.3.5-2024-19-06: New schedule in readme and u...	2024-06-19 23:45:43-05:00
4	Update README.md	2024-06-14 00:30:10-05:00
5	Update README.md	2024-06-14 00:23:51-05:00
6	0.3.3-2024-14-06:\n - Updated README.md to ...	2024-06-14 00:20:22-05:00