Research Task 5: Validation of SU Women's Lacrosse 2025 Statistics

Overview

This document compares results from Python-based data analysis to answers provided by ChatGPT, both referencing the same Syracuse Women's Lacrosse 2025 dataset. Each section shows the prompt given to ChatGPT, the Python answer, the ChatGPT answer, and a concise comparison.

A. How many games did the team play

ChatGPT Prompt:

text

How many games did the team play? Refer only to the data from the provided player, team, and schedule statistics.

- Python:
 - Team played 19 games
- ChatGPT:
 - The team played 19 games in total during the 2025 season
- Comparison:
 - Exact match

B. Who scored the most goals

ChatGPT Prompt:

text

Who scored the most goals? Please use only the data in the Player Statistics table.

Python:

Emma Muchnick 34 goals

ChatGPT:

The player who scored the most goals was Emma Muchnick 34 goals

• Comparison:

Exact match

C. Who had the most assists

ChatGPT Prompt:

text

Who had the most assists? Please use only the data in the Player Statistics table.

• Python:

Emma Ward 46 assists

ChatGPT:

The player with the most assists was Emma Ward 46 assists

• Comparison:

Exact match

D. Who contributed the most points

ChatGPT Prompt:

text

Who contributed the most points? Use only the Player Statistics table and report the player with the highest PTS column.

• Python:

Emma Ward 76 points

ChatGPT:

The player with the most points was Emma Ward 76 points

• Comparison:

Exact match

E. What are the team totals for goals, assists, points

ChatGPT Prompt:

What are the team totals for goals, assists, and points for the season? Please use the 'Totals' row in the Player Statistics table.

Python:

Goals 234, Assists 112, Points 346

ChatGPT:

Goals 235, Assists 112, Points 347

• Comparison:

Minor discrepancy likely due to inclusion or exclusion of summary or team rows

F. Most efficient scorer (goals per shot, minimum ten shots)

ChatGPT Prompt:

text

Who is the most efficient scorer? Calculate goals per shot (G/SH), only including players with at least 10 shots.

Python:

Sam DeVito 0.67 goals per shot

ChatGPT:

Sam DeVito with a 66.7 percent goal to shot ratio 8 goals from 12 shots

Comparison:

Exact match

G. Largest impact on draws per game

ChatGPT Prompt:

text

Which player had the largest impact on draw controls per game? Calculate draw controls (DC) per game played (GP), and list the top result.

• Python:

Joely Caramelli 2.05 draws per game

ChatGPT:

Meghan Rode 4.41 draws per game

• Comparison:

Discrepancy, possibly from data selection or filtering differences

H. Largest impact on ground balls per game

ChatGPT Prompt:

text

Which player had the most ground balls per game? Calculate ground balls (GB) per game played (GP) and provide the top result.

• Python:

Emma Muchnick 1.42 ground balls per game

ChatGPT:

Coco Vandiver and Kaci Benoit 1.79 ground balls per game

• Comparison:

Discrepancy; needs review of data selection and filtering

I. Turnover rate per game for starters

ChatGPT Prompt:

text

List the turnover rate per game for all 'starters' (players with at least 15 games played). Report the highest rates.

• Python:

Emma Ward 2.16 turnovers per game Emma Muchnick 1.63 Alexa Vogelman 1.42

ChatGPT:

Emma Ward 2.16 turnovers per game

Emma Muchnick 1.63 Alexa Vogelman 1.42

Comparison:
Close agreement

J. Most clutch player (most game-winning goals)

ChatGPT Prompt:

text

Who was the most clutch player? Report the player with the most game-winning goals (GW) from the Player Statistics.

Python:

Caroline Trinkaus 4 game winning goals

ChatGPT:

Caroline Trinkaus 4 game winning goals

• Comparison:

Exact match

K. Best defensive impact (caused turnovers per game minus turnovers)

ChatGPT Prompt:

text

Who had the best defensive impact? For each player, subtract turnovers (TO) from caused turnovers (CT), divide by games played (GP), and list the top result.

• Python:

Joely Caramelli 0.16 per game

ChatGPT:

Coco Vandiver net defensive score 1.95

• Comparison:

Different player identified; clarify metric used