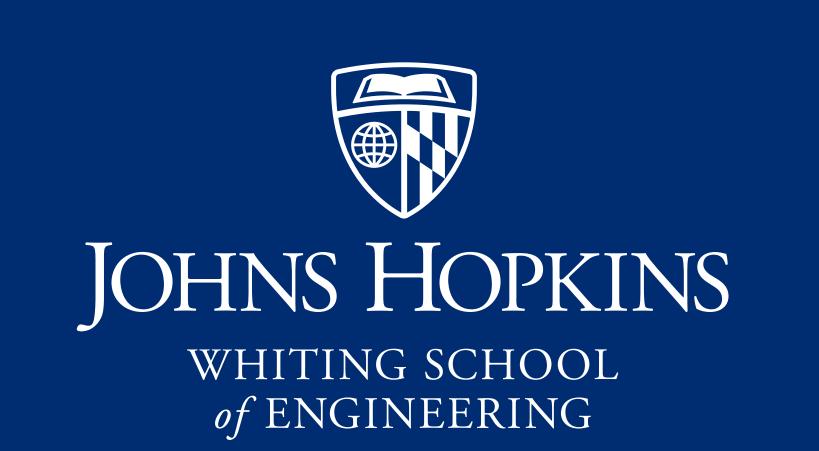


Soccer Defender Analytics

An Analysis of Imbalance in Soccer Player Evaluations

Design Day 2025 | JHU Sports Analytics Research Group sports-analytics.cs.jhu.edu

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The Challenge with Recognizing Defensive Players in Soccer

In soccer, attacking players often receive much more attention than defensive players, leading to a lack of recognition for top defenders in the sport.

As a group, we aimed to bridge this gap and create a fair, purely analytical rating system that gives defenders the credit they deserve.

What We Did

- Scraped 40+ data features from ~6,000 professional players.
- Trained 7 machine learning models to approximate subjective ratings based solely on player metrics.
- Developed a model that assigns and predicts ratings to evaluate defender performance.
- Created a system to analyze official and adjusted metrics, highlight defensive outliers, and predict future season metrics for each player.

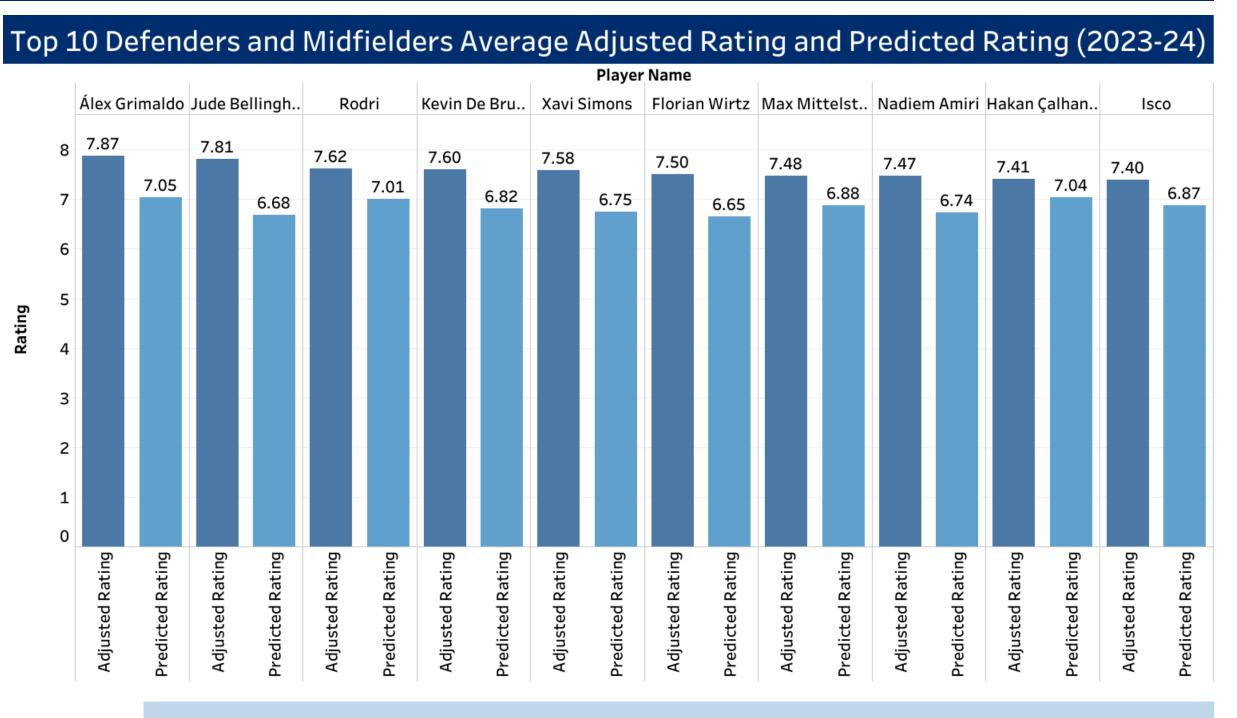
Results and Findings

Average Rating Per Position Post-Adjustment (2021-24)

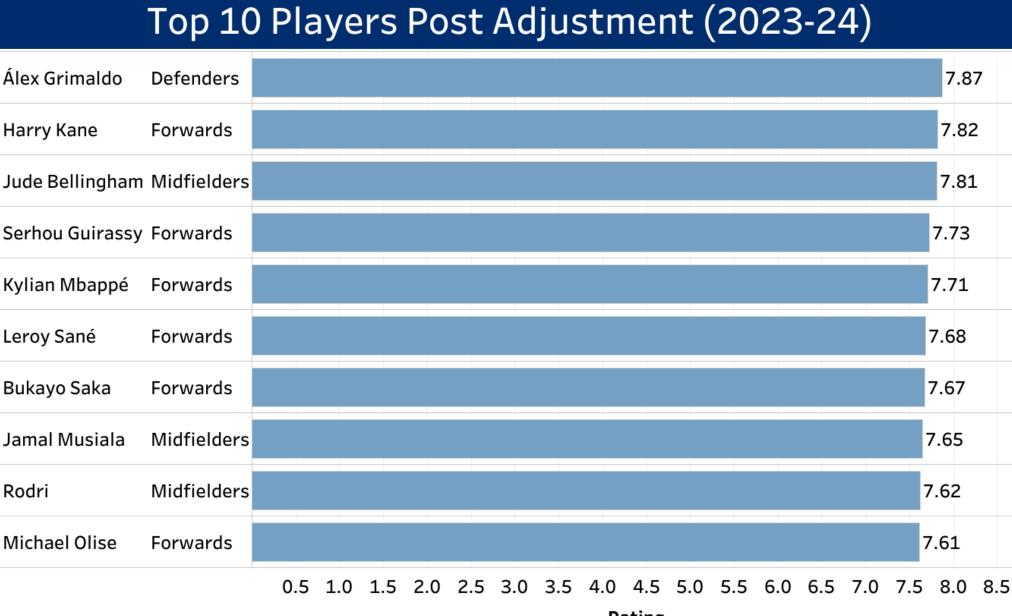


The resulting outliers were the defenders we hoped to be able to highlight for their particular performance.

Distribution scaling highlights outliers to the same degree across (most) positions, allowing for parallel statistical treatment.

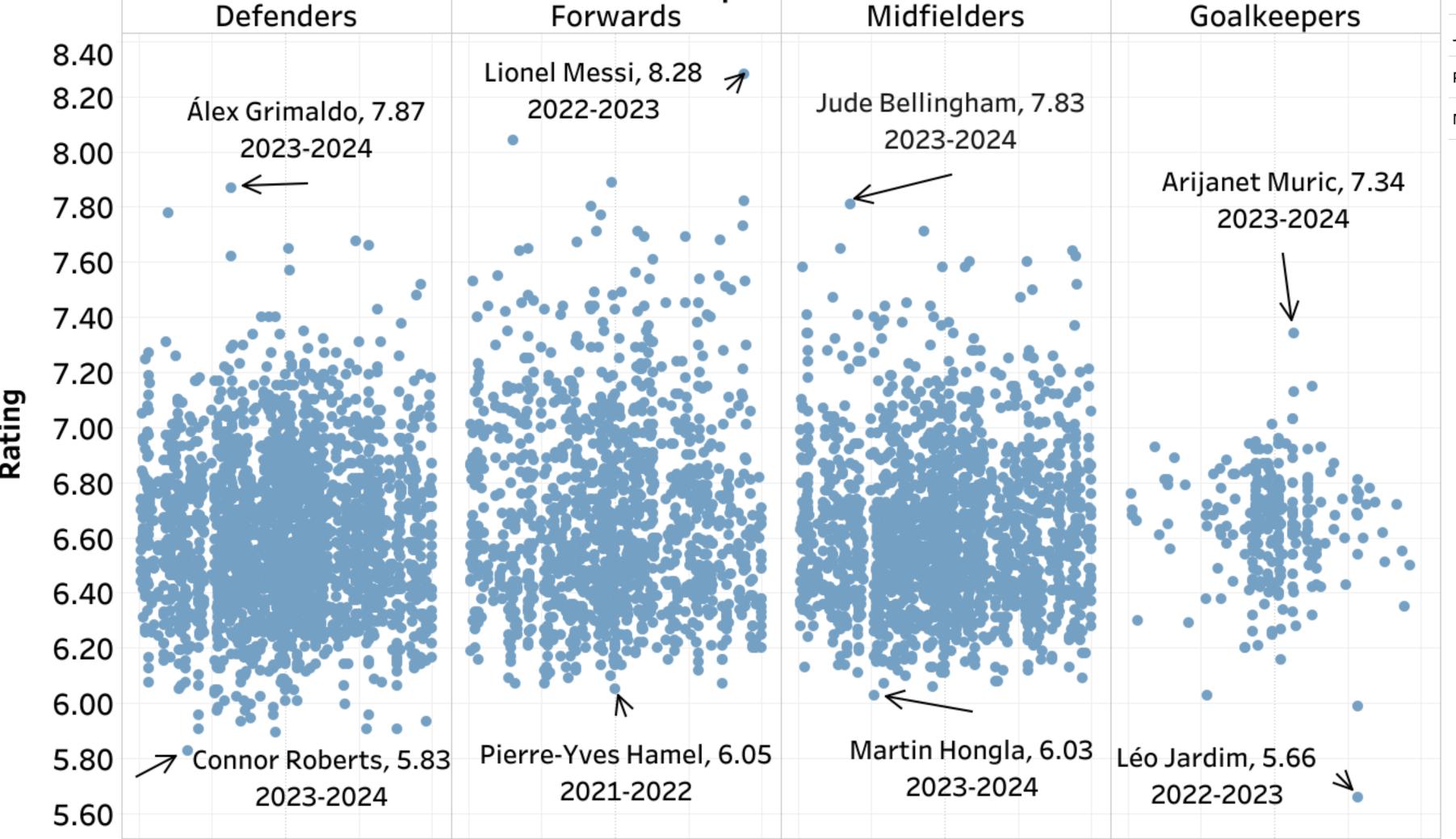


Grimaldo leaps from outside the top 10 to overtake Kane as the top-rated player.



Individual Average Player Ratings by Position Post-Adjustment (2021-24)

Grouped Positions



Conclusion

Our innovative rating system addresses the systemic undervaluation of defenders, providing equitable player valuations and a data-driven framework for recognizing defensive excellence.

For Data, References, and More Information, Scan the QR Code.