Paper Title: Predicting the Outcome of English Premier League Matches Using

Machine Learning

Paper Link: <a href="https://ieeexplore.ieee.org/document/9350327">https://ieeexplore.ieee.org/document/9350327</a>

# 1. Summary

#### 1.1 Motivation:

The main motive is to build a robust predictive model for football match outcomes by leveraging past game data using various algorithms and machine learning techniques.

#### 1.2 Contribution

The paper demonstrates good accuracy compared to existing models, offering valuable insights for sports stakeholders.

## 1.3 Methodology

The paper applied feature selection and five machine learning algorithms for predicting football match outcomes by comparing proposed models with existing ones and gave improved accuracy.

#### 1.4 Conclusion

The logistic regression led to improved accuracy in predicting football match outcomes compared to other models.

### 2 Limitations

### 2.1 First Limitation

Only looking at past data might miss important changes happening now, making predictions less accurate.

#### 2.2 Second Limitation

The model might not consider factors like player injuries or team strategies, which can greatly affect match outcomes.

# 3 Synthesis

The paper looks at different ways to predict English Premier League match results. It shows that using logistic regression works well for guessing whether a team will win, lose, or draw. It also compares these new methods to older ones and finds they're better. But it admits it's hard to consider everything like player injuries, so there's room to improve.