

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

**Paper Link:** <https://ieeexplore.ieee.org/document/9350327>

## 1 Summary

**1.1 Motivation:** The main motive is to build a robust predictive model for football match outcomes from leveraging past game data using various algorithm 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.

