

IPL Win Probability Predictor

ADTA 5340 Section(s) 501 and IPAC 4340 Section(s) 501

Discovery and Learning with Big Data

by

Group – 3

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Problem Statement:

The objective of this project is to predict the winning percentage of IPL matches. This will involve analyzing historical match data from 2008 to 2019, player statistics, team performances, and various external factors such as venue conditions and weather. The challenge lies in the dynamic nature of T20 cricket, where match outcomes can be highly unpredictable, making this an interesting and complex problem for machine learning.

Business Use Cases:

This project holds substantial potential for application in several domains, including:

- Team Management and Strategy: Informing team selection and opposition analysis to refine game strategies.
- Sports Media and Content Creation: Enriching pre-match analyses and real-time match insights with data-driven predictions.
- Marketing and Sponsorship: Creating targeted advertising campaigns and enhancing sponsorship propositions with predictive narratives.
- Sports Betting and Gambling: Enhancing betting odds accuracy, engaging users with predictive insights, and managing risk.

The datasets "matches.xlsx" and "deliveries.xlsx" will be instrumental in training and validating the predictive model. These datasets encompass detailed match statistics and delivery-by-delivery data, providing a robust foundation for analysis. We have taken the datasets from Kaggle.

Kaggle Dataset Link:

- <https://www.kaggle.com/datasets/ramjidoolla/ipl-data-set?select=deliveries.csv>
- <https://www.kaggle.com/datasets/ramjidoolla/ipl-data-set?select=matches.csv>