R GIRIDHARAN
B.Tech Artificial intelligence and data science
NM id : au821721243019
Sir Issac Newton college of engineering and technology

Naan muthalvan project

IPL SCORE PREDICTION USING NEURAL NETWORKS

AGENDA

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5. Solution and its Value Proposition
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INTRODUCTION

- This presentation will delve into the fascinating world of cricket analytics, specifically focusing on the Indian Premier League (IPL) – a tournament that captivates millions of fans around the globe.

- We will explore how the cutting-edge field of neural networks can be harnessed to predict IPL match scores with unprecedented accuracy.

PROBLEM STATEMENT

- The objective of this project is to develop a predictive model using neural networks that can accurately forecast the scores in IPL cricket matches.

- The challenge lies in processing and analyzing vast amounts of historical data, understanding the complex factors that influence cricket scoring, and designing a neural network that can learn from past trends to predict future outcomes.

PROJECT OVERVIEW

· This project aims to harness the power of neural networks to predict the scores in IPL matches with high accuracy.

· By analyzing historical data, including player statistics, team performance, weather conditions, and other relevant factors, the project seeks to build a robust model that can simulate and forecast match outcomes.

· This project stands at the intersection of sports analytics and machine learning, representing an innovative approach.

WHO ARE THE END USERS?

1. Cricket Teams and Coaches

2. Sports Analysts and Commentators

3. Fantasy Cricket Players

4. Data Scientists and Students

5. Cricket Enthusiasts and Fans

6. Bettors and Gambling Industries

SOLUTION :

· The model utilizes ReLU (Rectified Linear Unit) as the activation function for hidden layers to introduce non-linearity, allowing it to learn complex patterns in the data.
· For the output layer, linear activation functions are used to predict continuous score values.

VALUE PROPOSITION :

· It serves as a testament to the potential of neural networks in processing complex datasets and making predictions that can impact decision-making processes in dynamic environments like sports.

WOW IN MY SOLUTION

High Accuracy:

· Your model's ability to predict scores with remarkable precision, surpassing existing benchmarks.

Complex Data Handling:

· The neural network's capability to process and learn from vast and complex datasets, including diverse factors that influence cricket scoring.

Innovative Use of Technology:

· The application of advanced machine learning techniques and tools like Keras, TensorFlow, and Seaborn to solve a real-world problem.

MODELLING

Input Layer: The first layer of the network receives the preprocessed and normalized data, ensuring that the model has a standardized input to work with.

Hidden Layers: We utilize multiple hidden layers with ReLU (Rectified Linear Unit) activation functions.

Output Layer: The final layer of the network uses a linear activation function.

Regularization: To prevent overfitting, we implement regularization techniques.

Evaluation: Post-training, the model is evaluated using a separate test dataset to assess its predictive performance.