

IPL DATA ANALYSIS

Project report submitted

In partial fulfillment of the requirement of the degree of

Bachelor of Science

In

Data Science

By

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Under the Supervision of

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SOET DEPARTMENT

**K.R MANGALAM UNIVERSITY, GURUGRAM,
HARYANA INDIA,**

June, 2023

A handwritten signature in purple ink, enclosed in a rectangular box.

**Registrar
K R. Mangalam University
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DECLARATION

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will cause disciplinary action by the Institute and can also invoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.



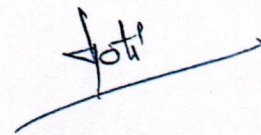
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CERTIFICATE

This is to certify that major project report entitled " IPL DATA ANALYSIS" is submitted by "Rohit" in Partial Fulfilment of the requirements for the award of "Bachelor of Science (Hons) Data Science" branch during the academic year 2020-2023 from "K.R Mangalam University, Sohna, Gurugram", It is a record of his own work carried by him under my guidance and supervision. To the best of my knowledge, the matter presented in this major project is original work and has not been submitted anywhere for the award of any other diploma or degree certificate.

UNDER THE GUIDANCE OF



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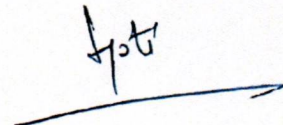
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APPROVAL SHEET

This project report entitled "**IPL DATA ANALYSIS**" by **Rohit** is approved for the degree of **Bachelor of Science (Hons) Data Science, School of Engineering and Technology.**


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ACKNOWLEDGEMENT

It gives me immense pleasure to express my deepest sense of gratitude and sincere thanks to my highly respected and esteemed guide **Mrs. Jyoti Kataria, SOET Department**, for his/their valuable guidance, encouragement and help for completing this work. His/Their useful suggestions for this whole work and co-operative behavior are sincerely acknowledged.

I would like to express my sincere thanks to **Mrs. Asha Sohal, SOET Department** for giving me this opportunity to undertake this project. I would also like to thank **Mrs. Shweta Bansal (H.O.D), SOET Department** for wholehearted support.

I also wish to express my indebtedness to my parents as well as my family member whose blessings and support always helped me to face the challenges ahead.

At the end I would like to express my sincere thanks to all my friends and others who helped me directly or indirectly during this project work.



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ABSTRACT

Cricket is a popular sport not only in India but also in the surrounding areas the world. Specifically, the T-20 format of this game is very popular in recent years. Today one of the championships named as Indian premier league (IPL) associated with this format has grown rapidly. But cricket is always said it is a game of uncertainty. Predicting the winner of the tournament or the game has an area of concern for many fans. Technology, on the other hand, is developing at an alarming rate. In this project we use python modules i.e., NumPy, panda, matplotlib and seaborn. NumPy is used to create array. Panda is used to data frame and excel file. Matplotlib and seaborn is used for Graph Plotting. In this project we take real data from Kaggle which are of (2008-2022). In this project we will also predict the probable percentage of winning of team in the IPL using different supervised learning methods.

List Of Figures

- Fig.1 Tata IPL 2022 Special Rating and Ranking the Best Playing 11 of all Teams.
- Fig.2 Types of Machine Learning
- Fig.3 features of python
- Fig.4 System architecture
- Fig.5 Deliveries file
- Fig.6 Matches file
- Fig.7 Pre-processed data
- Fig.8 testing data set
- Fig.9 Venue of matches played in IPL
- Fig.10 Toss won by teams
- Fig.11 toss decision by teams
- Fig.12 Winning teams
- Fig.13 Matches won by team wicket runs
- Fig.14 Winning teams in superover
- Fig.15 Max no. of final by IPL teams
- Fig.16 Max IPL season wins
- Fig.17 Max man of the matches

CHAPTER 6

CONCLUSION AND RECOMMENDATION FOR FUTURE SCOPE

CONCLUSION

Here we made our IPL match winning Machine learning model. This will make things easier so that any one check the match prediction just by using their mobile or PC. And our project is even better than previous projects made by other researchers because we made a website with the help of streamlet, as with the help of the model any one can easily access this from there place and this provides more accurate prediction which is approximately 80% earlier in other models [1],[2] where accuracy was 68.33% and 63.89% respectively which was quite low and there predictions might be even less because of the reason that those projects were trying to predict the match result before the start of match which leads to automatic less accuracy but in our project this is more effective because we are predicting match winning percentage in the second inning.

FUTURE SCOPE

Cricket is often referred to as a game of uncertainty. After studying the opponent team on many criteria such as the opponent team's players and their current form, climatic conditions, play grounds, and so on, the system may be enhanced with new capabilities such as player recommendation for strategic lead. Another factor that can improve the model's performance is the addition of a larger sample set or new Indian Premier League season data.

REFERENCES

- [1] Abhishek Naik, Shivani Pawar, Minakshi Naik, Sahil Mulani, "Winning Prediction Analysis in One-Day-International (ODI) Cricket Using Machine Learning Techniques", International Journal of Emerging Technology and Computer Science, Volume: 3 Issue: 2 (April 2018)
- [2] Arjun Sanghvi, Ashish Shenoy, Shruthi Racha and Srinivas Tunuguntla. "Prediction of the outcome of a Twenty-20 Cricket Match." (2015).
- [3] Akhil Nimmagadda, Nidamanuri Venkata Kalyan, Manigandla Venkatesh, Nuthi Naga Sai Teja, Chavali Gopi Raju, "Cricket score and winning prediction using data mining", International Journal of Advance Research and Development, Volume: 3 Issue: 3 (2018)
- [4] Abhishek Naik, Shivani Pawar, Minakshi Naik, Sahil Mulani, "Winning Prediction Analysis in One-Day-International (ODI) Cricket Using Machine Learning Techniques", International Journal of Emerging Technology and Computer Science, Volume: 3 Issue: 2 (April 2018)