







MENTOR



ANIKET CHHABRA

Lead Data Scientist - PayPal

Overall Ratings 4.8+

Engagement Hours.....400+

Learners Impacted 1000+

Mr. Aniket is a data evangelist with rich experience in supporting Marketing and Sales Business Units. He holds expertise in building and deploying Machine Learning models ranging from Logistic Regression, Random Forests, XG Boost, SVMs to Text Mining techniques. He is an alumnus of Delhi School of Economics.

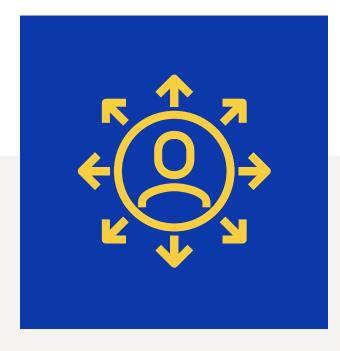
IN THIS SESSION, YOU WILL:



Learn how to master Data Science without quitting your job.



Know about the guidance you will get on your learning journey.



Understand how Data Science can solve business problems.

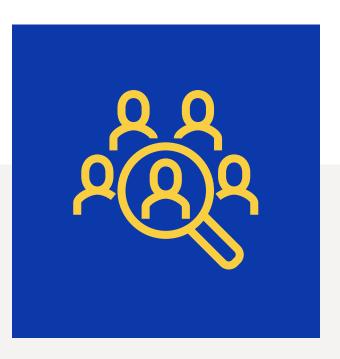


Chart your Data Science career path with Great Learning.



WHY DATA SCIENCE?



137,630 Data
Science job
openings in India:

Analytics Insight



The data analytics market is expected to grow up to US\$18.9 Billion in India:

Analytics Insight



Rise of Data
Science will create
11.5 million jobs by
2026:

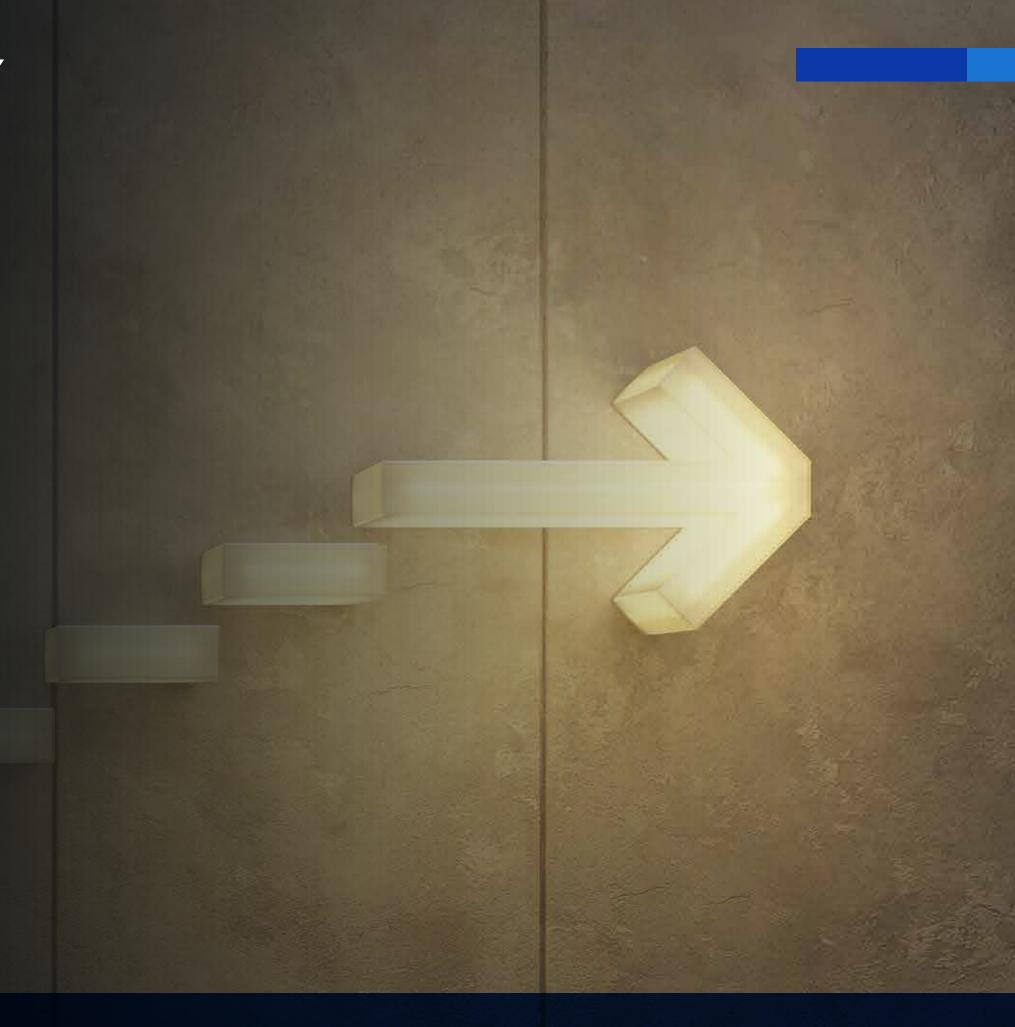
U.S. Bureau of Labor Statistics



LEARNING OBJECTIVES FOR TODAY

- Understand how to analyze dirty data
- **Exploratory Data Analysis**
- Application of statistical and visualization libraries
- The art of generating stories out of data

"Let's make this session interactive. While we solve the business problem, think in parallel: how can you solve business problems around you?"



PROBLEM STATEMENT

Ever since its inception, Cricket has developed manifold. The world has seen many variants of the game, test cricket to begin with, then One Day Internationals and recently T-20 cricket. Due to the shorter format, T-20 cricket has been adopted by many cricket leagues around the world, IPL being the biggest of them.

The Indian Premier League is a professional Twenty20 cricket league in India is usually contested between March and May of every year by eight teams representing eight different cities or states in India. Cricketers are accompanied by a team of coaches, support staff, and data scientists as well. These data scientists work upon the large chunks of data generated every match and inform coaches, captains and team management about the meaningful insights.

Let's assume, you are one of the data scientists associated with the Chennai Super Kings team. Your job in today's session is to derive those meaningful insights from the IPL data and provide actionable insights to the players and coaches so that they can perform well in the upcoming season.



POINTS THAT CAN BE TAKEN INTO CONSIDERATION FROM CSK POINT OF VIEW:

1. Impact of toss on their win percentage:

Our data says if CSK wins the toss, then the chance of winning the match is more than 33%. (Out of 89 matches, CSK won 48 tosses, and out of these matches, CSK won 30 matches)

2. Impact of cities on their win percentage:

CSK has a record of winning matches when the city of the match is the home ground/city i.e. Chennai. As per data out of 34 matches played in Chennai CSK has won 26 matches i.e., 76% which is the maximum compared to other cities.

3. Most impactful player of CSK against each team (Man of the Match):

On an avg. MS Dhoni is the most impactful player against any team. Let's talk about impactful player against individual teams on the basis of Man of the Match from past records:





Vs DC: Though there is a tie between Dhoni, Bollinger, Morkel, Jadeja, and Raina, as all of them have been awarded 'Man of the Match' once. But in terms of winning by Runs, MS Dhoni is the clear winner for CSK against DC.

Vs Kings XI Punjab: There are seven players who holds the record of being Man of Match in the seven matches. But, if we consider BB. McCullum, the match at which he was the MOM, CSK won by 97 runs being the highest against Kings XI.

Vs Kochi Tuskers Kerala: Wriddhiman P Saha.

Vs KKR: There are five players who have been awarded 'Man of the Match' in five matches. But, if we consider MS Dhoni, the match where he won the MOM, CSK won by 55 runs being the highest run margin against KKR.

Vs MI: Suresh Raina (2 MOM against MI).



Vs Pune Warriors India: There are three CSK players who won MOM award against them. But, if we consider MS Dhoni, the match where he won the MOM, CSK won by 37 runs being the highest run margin against PWI.

Vs RR: There are 2 CSK players i.e. Ravindra Jadeja and Murali Vijay winning 2-2 'Man of the Match' award. But, if we consider Murali Vijay, the match where he won the MOM, CSK won by 86 runs being the highest run margin.

Vs RCB: Suresh Raina (Twice).

Vs SRH: There are three CSK players who won 'Man of the Match' award against them. But, if we consider Suresh Raina, the match where he won the MOM, CSK won by 77 runs being the highest run margin against SRH.



4. The top 3 difficult teams to beat?

As per our analysis, CSK has lost a total of 38 matches. They have won for the most number of times (7 times) against MI and KKR, followed by RR (5 times).

5. Impact of toss on their win percentage against the 3 most difficult teams to beat:

If playing against MI:

Out of the 12 times CSK has played against MI, they have won the toss 5 times, all 5 times they chose to bat first and won. Hence, CSK should always choose to bat first if they win a toss against MI.

If playing against KKR:

When KKR wins the toss, they have a bigger chance of winning as per the data. KKR has won the toss 5 times and out of these 5 matches, they won 3 matches. Whereas, CSK won toss seven times and won 3 matches only.

If playing against RR:

When CSK wins the toss, then chances of losing the match increase as CSK has won toss 5/12 times and out of these 5 times, CSK has lost the match 3 times.



4. If they win the toss, what should they opt for (bat/bowl) against each team, considering their toss decision - win ratio!!

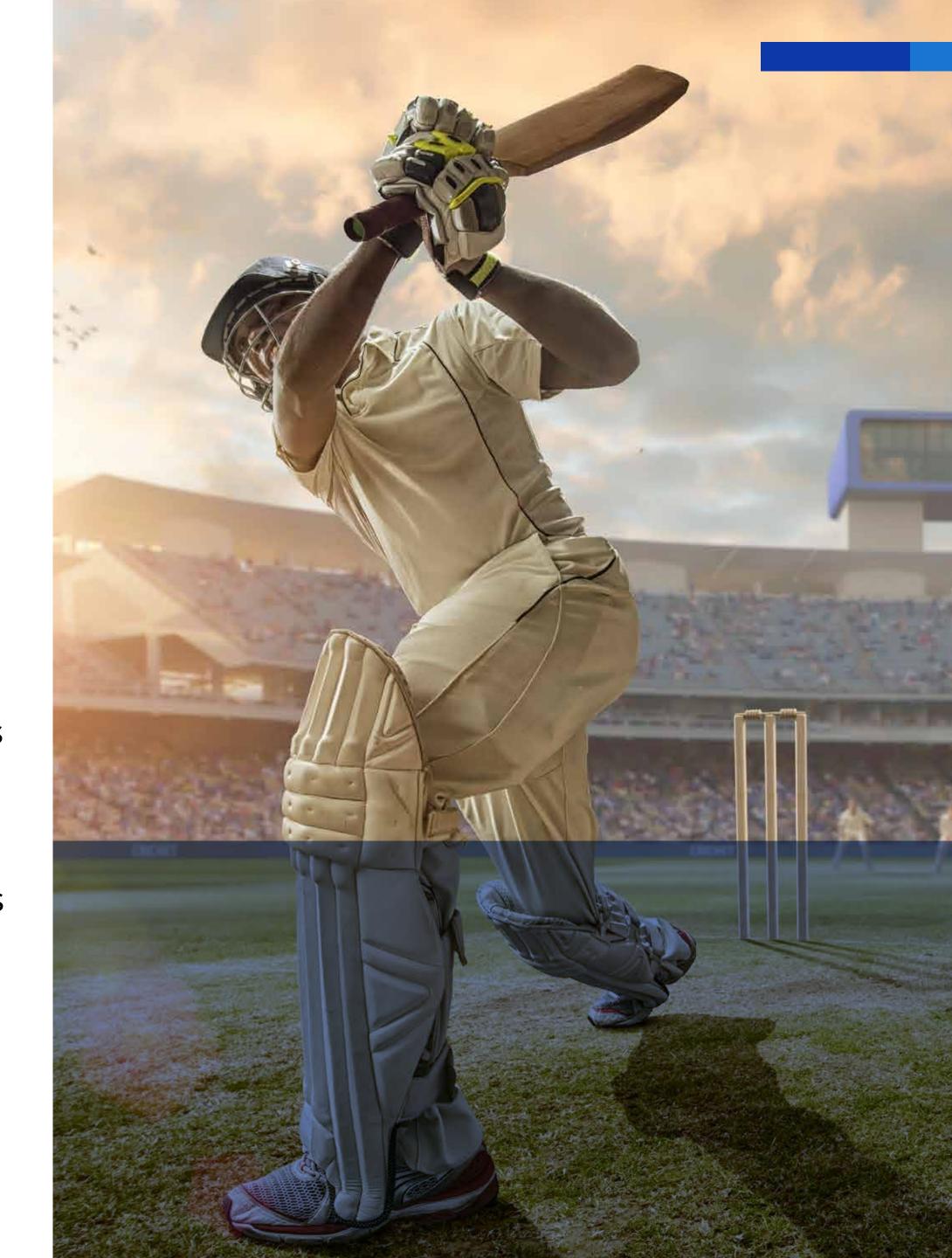
Suggestions for CSK for on opting bat/field against each team:

Vs Delhi Capitals: CSK should choose to bat (4 times CSK has won the match by choosing to bat, out of 5 toss wins)

Vs Delhi Daredevils: CSK should choose to bat (4 times CSK has won the match by choosing to bat, out of 7 toss wins)

Vs Kings XI Punjab: CSK should choose to bat (6 times CSK has won the match by choosing to bat, out of 7 toss wins)

Vs Kolkata Knight Riders: CSK should choose to FIELD (4 times CSK has lost by choosing to bat, out of 7 toss wins).



Vs Mumbai Indians: CSK should choose to BAT (3 times CSK has won the match by choosing to bat, out of 5 toss wins)

Vs RR: CSK should choose to FIELD (3 times CSK has lost the match by choosing to bat, out of 5 toss wins)

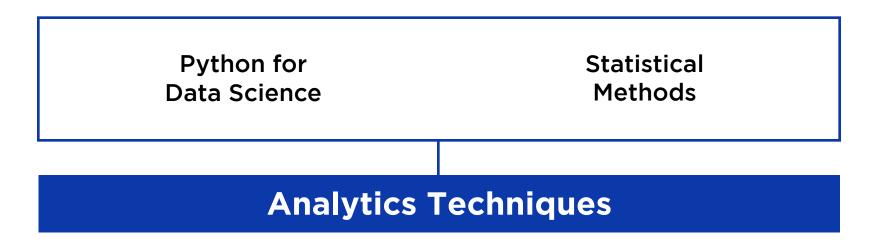
Vs RCB: CSK should choose to bat (5 times CSK has won the match by choosing to bat, out of 7 toss wins)





PROGRAM STRUCTURE

Foundation Building



Advanced Statistics

- Linear Regression
- ANOVA
- Factor Analysis
- Principal Component Analysis

Data Mining

- Supervised Learning
- Unsupervised Learning
- Decision Trees
- Discriminant Analysis

Predictive Modeling

- Multiple Linear Regression
- Logistic Regression
- Neural Network
- Model Comparison

Time Series Forecasting

- Time Series Analysis
- Holt Winters
- ARMA

Machine Learning

- KNN & Naïve Bayes
- Lasso Vs Ridge Regression
- SMOTE
- Bagging/ Boosting
- Model Comparison

Data Visualization

- Dashboard Design
- Charts
- Reporting
- Visual Analytics
 Best Practices

Career Workshop Marketing Financial and Retail and Risk SQL Social Media Analytics Analytics

Industry
Interaction
Series

Capstone Project

Hackathon Event

THE GREAT LEARNING ADVANTAGE

With you every step of the way:

Mentorship	Completion Rates	Feedback	Live Webinar	Doubt Dealing
Every week	95%+	95%+ VS or S	UT Austin faculty takes live webinar every month	Level 1: Mentor
Same mentor stays with you throughout	Learner-centric approach	90% of the session is rated 4.5+	Sports analytics	Level 2: Peer Group
Mentor is a part of WhatsApp group along with 15 others	Dedicated program manager	Feedback taken after every session	Decision making under uncertainty	Level 3: Acad Ops team, Great Learning
Homogenous grouping to ensure seamless experience & networking				Level 4: Monthly round-up of doubts



THANKYOU