

# NBA PLAYER COMPARATOR

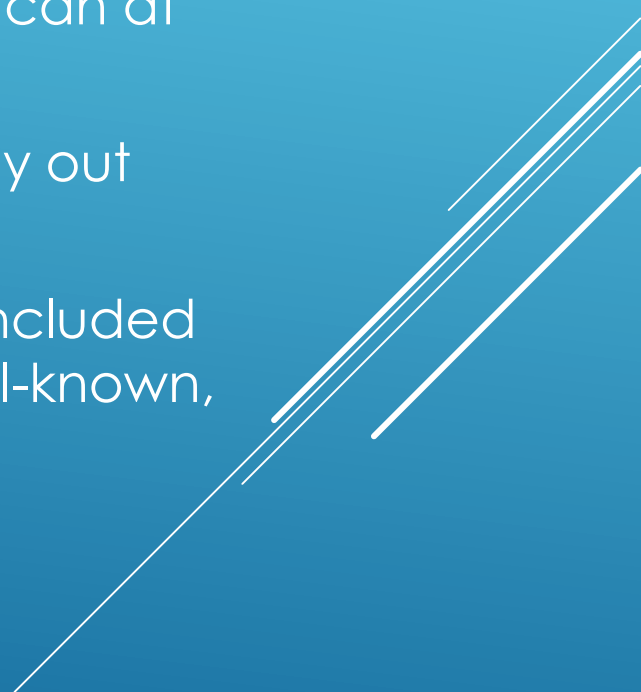
Presentation by Mitchell McPartland Jared Sarabia

# MOTIVATION

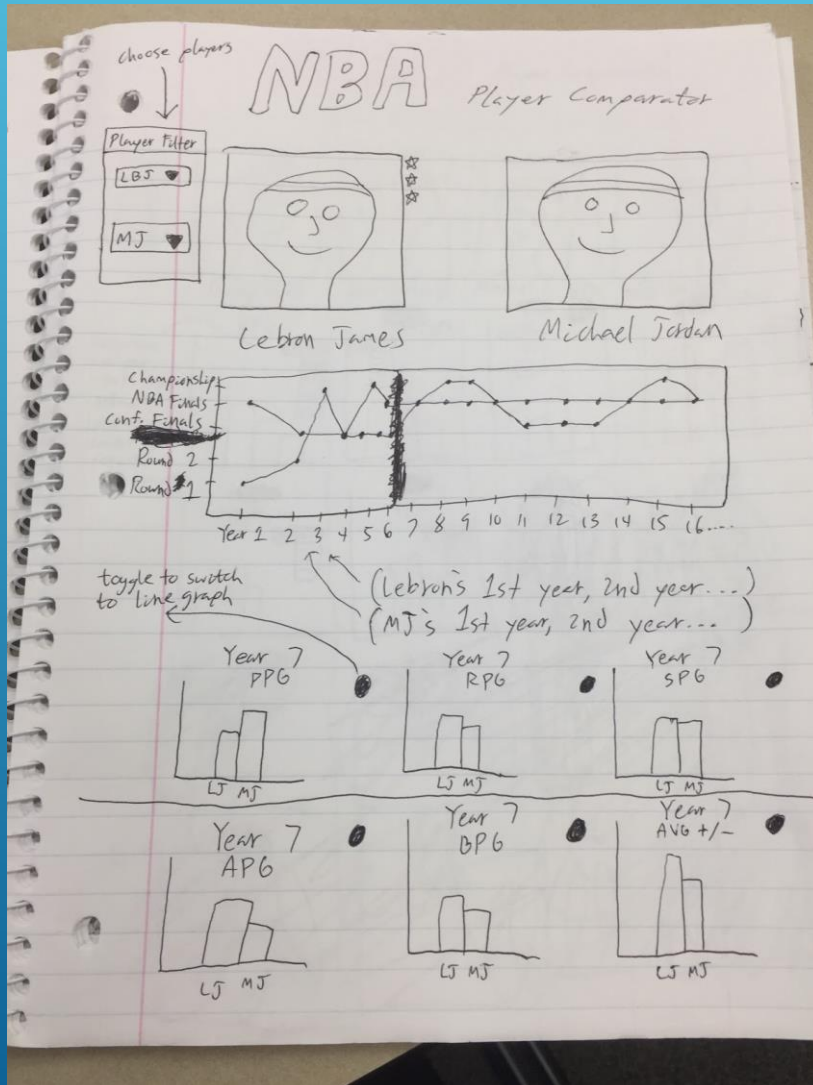
- ▶ The idea came from the constant NBA debate: who is the greatest of all time, Michael Jordan or LeBron James?



# MOTIVATION

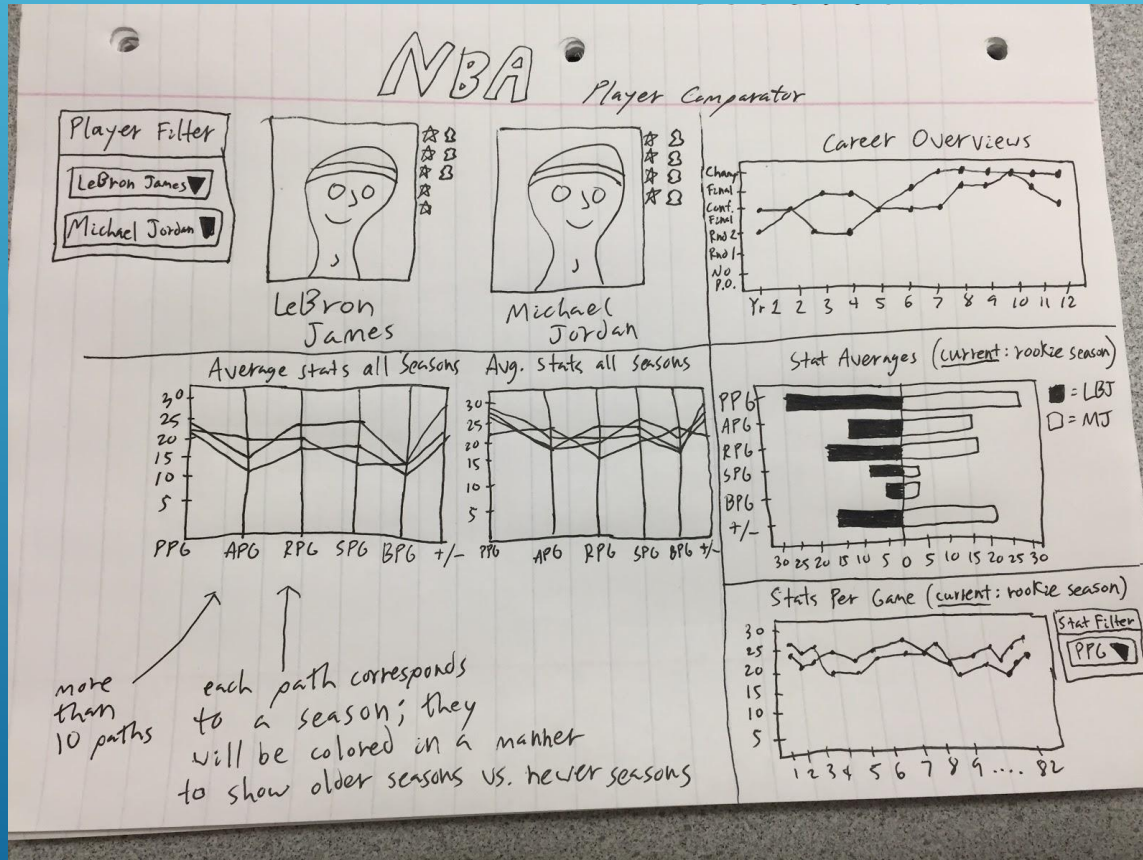
- ▶ His Airness vs The King
  - ▶ The better scorer vs the better floor general
  - ▶ Though there are certain factors we cannot quantify (i.e. “killer instinct”, the game evolving, straight from high school vs college, etc), we can at least compare on the stats we do have
  - ▶ NBA fans are meticulous, leading to some robust data sets already out there, from Kaggle and basketball-reference
  - ▶ These data sets included other legendary players as well, so we included players that have reached certain milestones or are currently well-known, to provide some context
- 
- Several white lines of varying lengths and angles are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

# THE BASIC START



- ▶ Originally compare the season outcomes in terms of how far into the playoffs they went
- ▶ For every season, we then compare the stats of the two players in double bar graphs, showing the six main “positive” stats, such as points per game and steals per game, and possibly some “negative” stats, such as turnovers per game or number of ejections for the season
- ▶ We wanted to keep it simple, so basketball fans could easily read and compare players

# THE REVISED PROPOSAL



- ▶ Once given some advice and recommendations, we revised our proposal to include more details-on-demand
- ▶ This design compressed our graphs to give more details, while also providing a better overall picture of each player over the course of each season and their career



# PROJECT OUTCOMES

- ▶ Our designs went through various changes, switching from a single dashboard to scrolling down to show a story back to a condensed dashboard with different visualizations than originally intended
- ▶ One of the best parts of the project is our ability to compare players at the career level and at the seasonal level, thanks to the detail in the data
- ▶ This gave us the ability to go from overview to details-on-demand
- ▶ We were able to gain insights on how players evolved their game over time, as well as how consistently they maintained their production level over time
- ▶ The audience should note that while we can show the recorded stats, we cannot show how impactful the player was on their teams, their cities, and the game overall

# PROJECT DETAILS



## Player Comparitor

### Player Filter

LeBron James ▼

Michael Jordan ▼

\*Hover your mouse over either name in the Legend to filter the other player

### Legend

LeBron James  
Michael Jordan

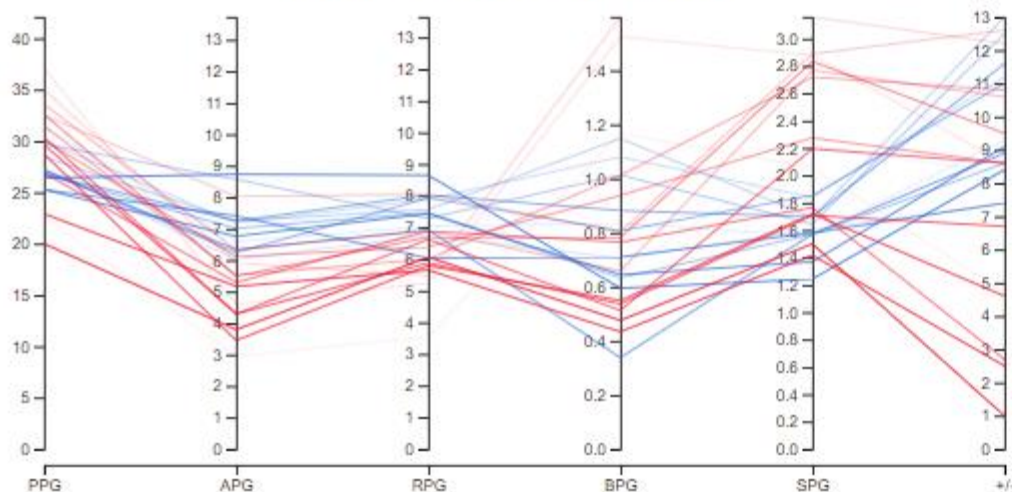


LeBron James



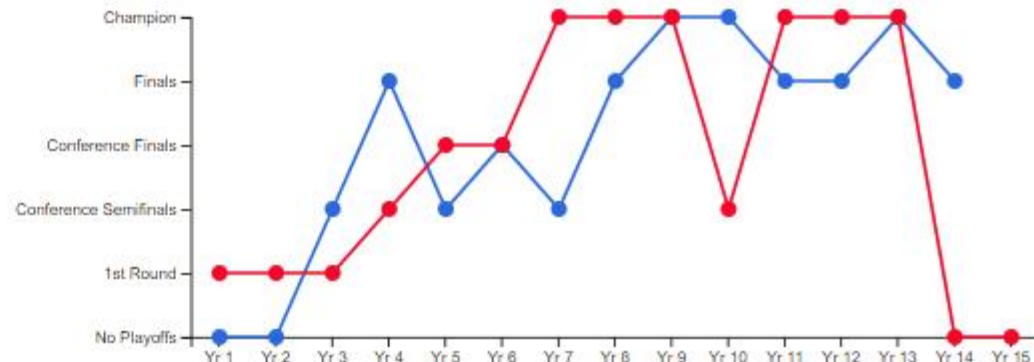
Michael Jordan

### Average Stats for Each Season



### Playoff Results for Each Season

\*Hover your mouse over any circle to see the Playoff results for that series



Click any of the circles on the Playoff Results chart to update the chart below!  
\*Notice below the Season changing when you click different circles

### Average Stats for a Single Season

Current: Rookie Season (for each player)

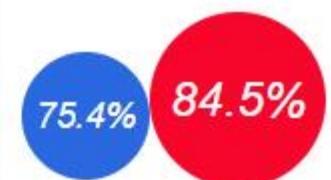
Points Per Game (PPG)	Assists Per Game (APG)	Rebounds Per Game (RPG)
20.94 28.21	5.89 5.87	5.47 6.51
Steals Per Game (SPG)	Blocks Per Game (BPG)	+/- Score for Season
1.65 2.39	0.73 0.84	1.90 8.20

\*Hover your mouse over any of the numbers above to see the Career Average stats of the players!

### Field-Goal Percentage



### Free-Throw Percentage



### Three-Point Percentage

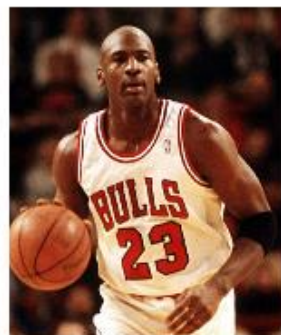


- Kareem Abdul-Jabbar
- Karl Malone
- Kevin Durant
- Kevin Garnett
- Kobe Bryant
- Larry Bird
- LeBron James**
- Michael Jordan
- Mike Bibby
- Mitch Richmond
- Moses Malone
- Oscar Robertson
- Patrick Ewing
- Pau Gasol
- Paul George
- Paul Pierce
- Ray Allen
- Reggie Miller
- Robert Parish
- Rudy Gay
- Russell Westbrook
- Scottie Pippen
- Shaquille O'Neal
- Stephen Curry
- Steve Nash
- Tim Duncan
- Tom Chambers
- Tony Parker
- Vince Carter
- Walt Bellamy

## Comparator

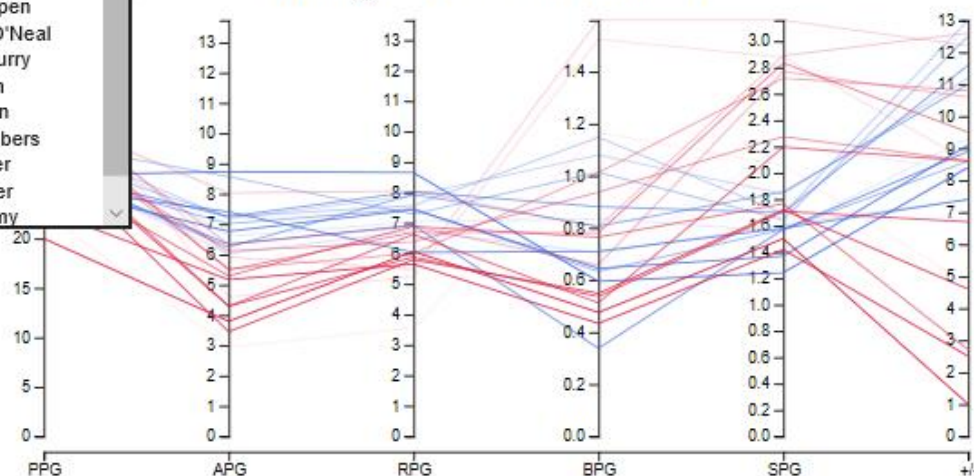


LeBron James



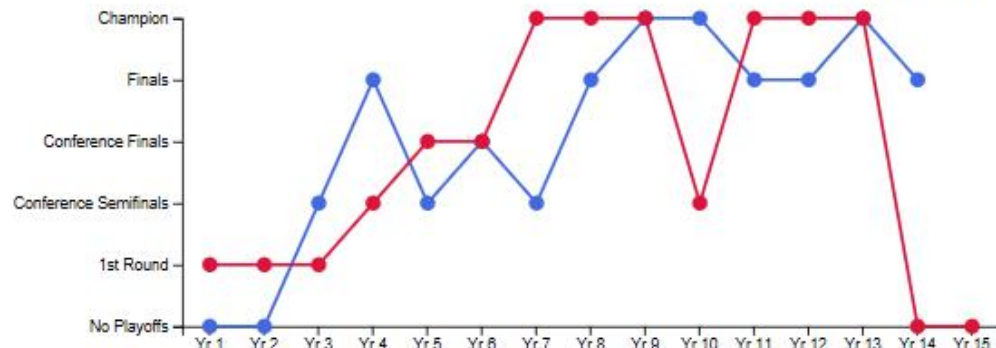
Michael Jordan

### Average Stats for Each Season



### Playoff Results for Each Season

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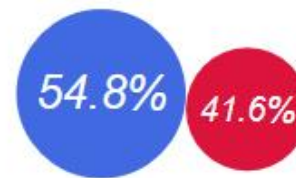
### Average Stats for a Single Season

Current: Season 14 (for each player)

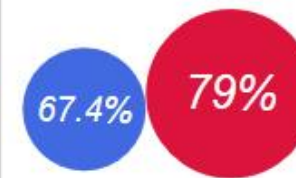
Points Per Game (PPG)	Assists Per Game (APG)	Rebounds Per Game (RPG)
26.41 22.92	8.73 5.17	8.65 5.65
Steals Per Game (SPG)	Blocks Per Game (BPG)	+/- Score for Season
1.24 1.42	0.59 0.43	8.40 2.50

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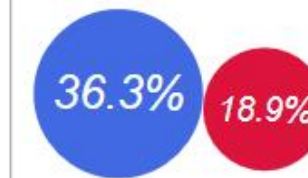
### Field-Goal Percentage



### Free-Throw Percentage



### Three-Point Percentage







# Player Comparator

## Player Filter

Stephen Curry

Michael Jordan

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## Legend

Stephen Curry  
Michael Jordan

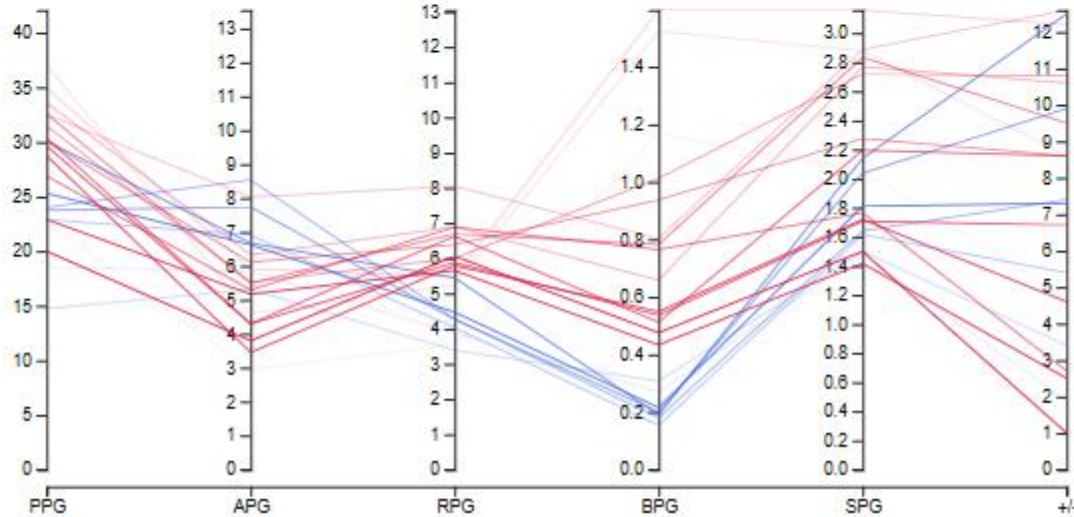


Stephen Curry



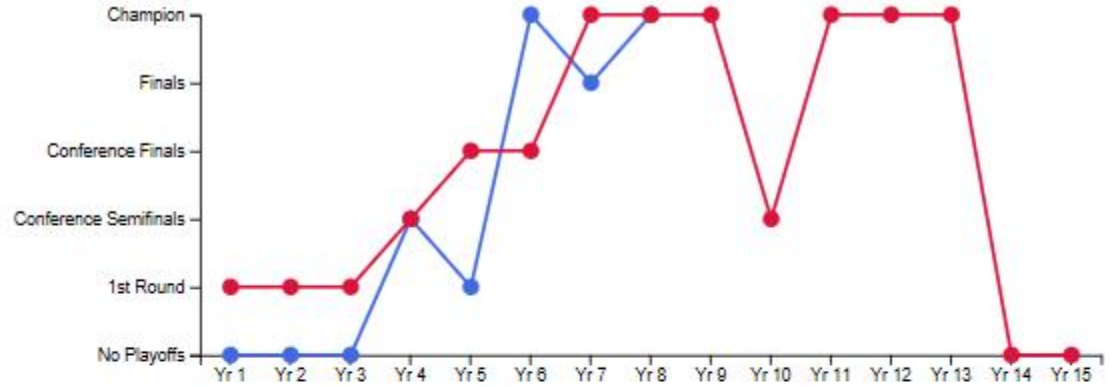
Michael Jordan

## Average Stats for Each Season



## Playoff Results for Each Season

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## Average Stats for a Single Season

Current: Rookie Season (for each player)

Points Per Game (PPG)	Assists Per Game (APG)	Rebounds Per Game (RPG)
17.49 28.21	5.90 5.87	4.45 6.51
Steals Per Game (SPG)	Blocks Per Game (BPG)	+/- Score for Season
1.90 2.39	0.24 0.84	1.00 8.20

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# Player Comparator

## Player Filter

LeBron James

Michael Jordan



LeBron James



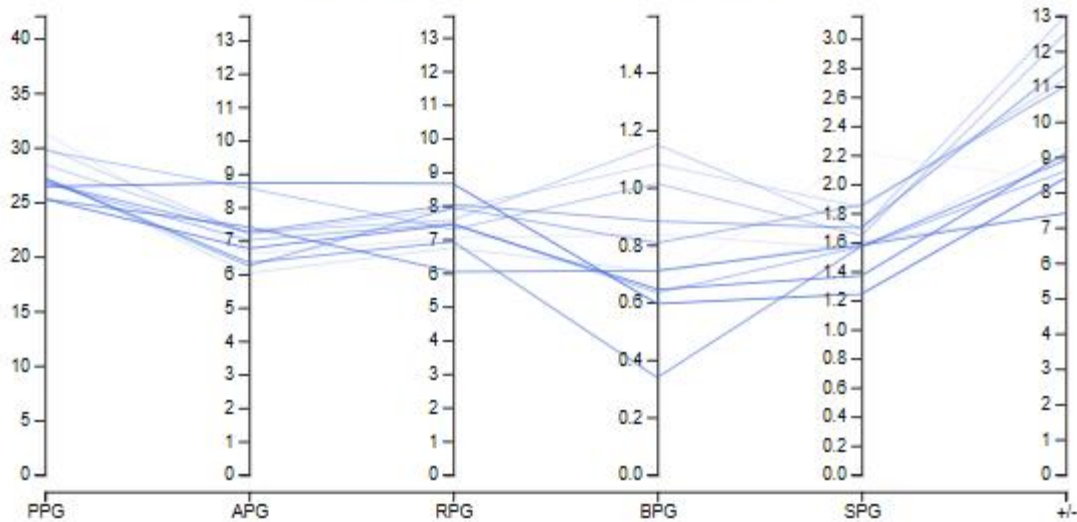
Michael Jordan

## Legend

LeBron James

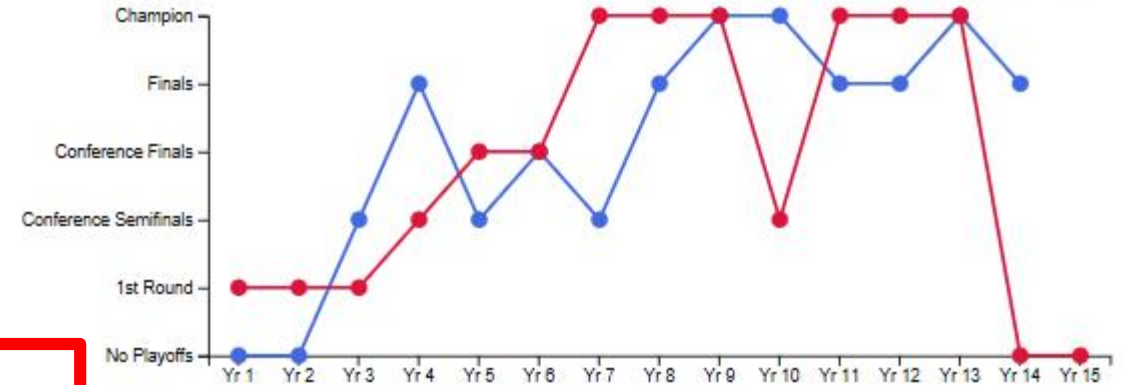
Michael Jordan

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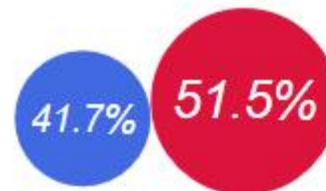
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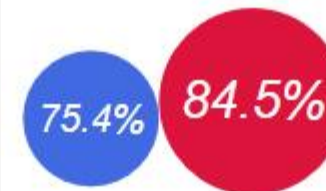
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# Player Comparator

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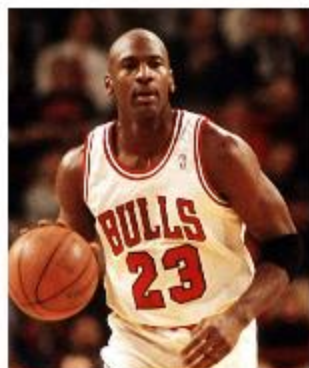
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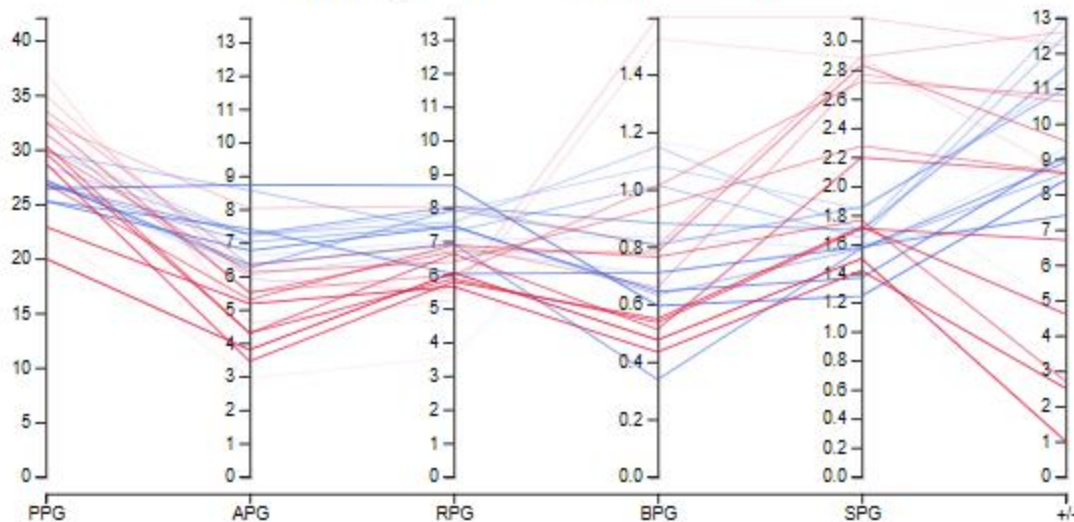


LeBron James



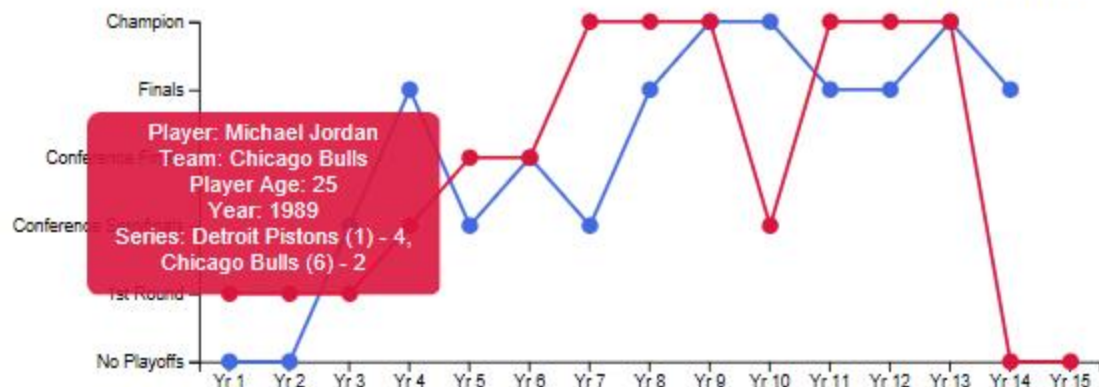
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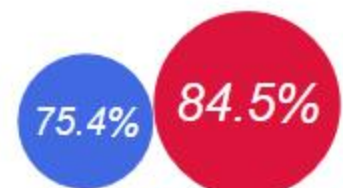
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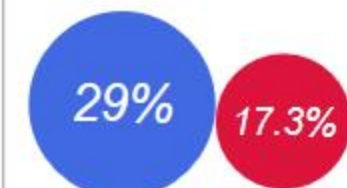
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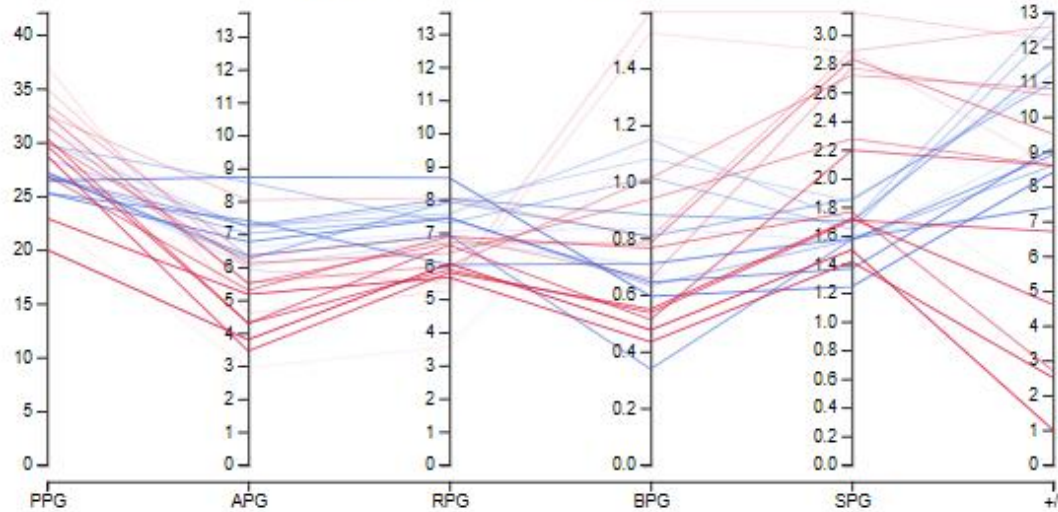


LeBron James



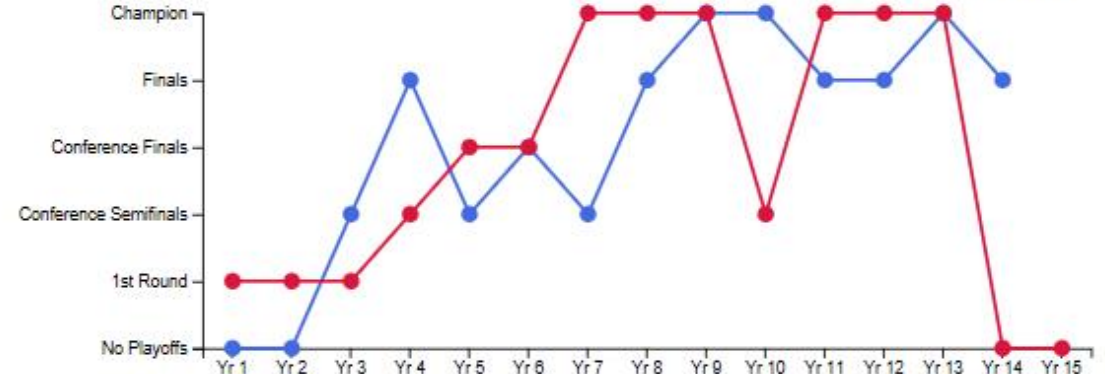
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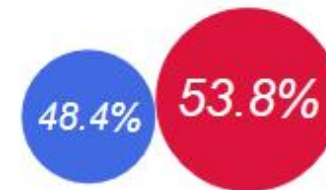
## Average Stats for a Single Season

Current: Season 5 (for each player)

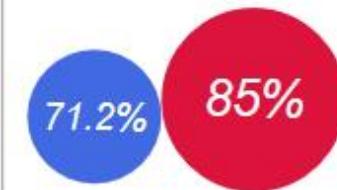
Points Per Game (PPG)	Assists Per Game (APG)	Rebounds Per Game (RPG)
30.00 32.51	7.19 8.02	7.89 8.05
Steals Per Game (SPG)	Blocks Per Game (BPG)	+/- Score for Season
1.84 2.89	1.08 0.80	11.20 12.60

\*Hover your mouse over any of the numbers above to see the Career Average stats of the players!

## Field-Goal Percentage



## Free-Throw Percentage



## Three-Point Percentage



On click, the bottom graphs reflect the selected season



QUESTIONS?

