

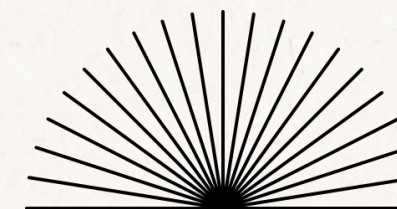


May 2025

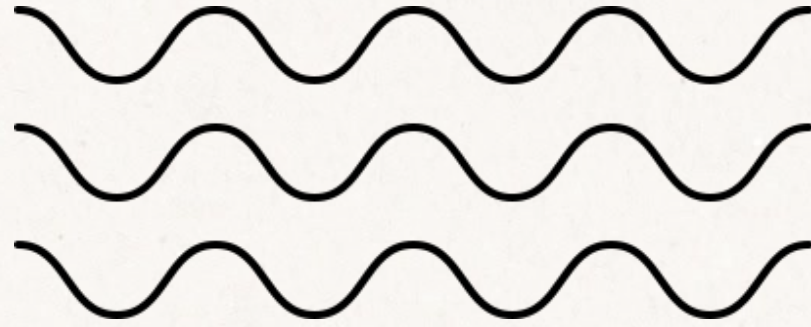
# NBA Data-Driven Playbook

Conner Bartels

<https://github.com/connerbartels/nba-data-fulfillment-project>







# Turning NBA Stats into Strategy

**Who am I helping?**

NBA media & marketing teams

**What problem am I solving?**


Figuring out what drives correlation between team performance and fan engagement

**How will I solve the problem?**


Analyze data to align strategy with performance & popularity

:





# Data Analyst & Data Engineer



**Real-world skills that I used ...  
which would be needed to fulfill a  
Data Analyst & Engineer job:**

01	SQL (joins, CTEs, window functions)
02	Python for APIs + scraping
03	AWS RDS (PostgreSQL)
04	GitHub Actions for ETL



# API Data Source



## Source

*“BallDontLie” API*



## Job Relevance

*REST API Use  
Schema Design*



## Collected

*Team Name  
Conference  
Division  
City*



## Pipeline

*Python → CSV → PostgreSQL*





# API Descriptive Analytics SQL Query

## Insight

Top teams aren't always the most followed

## Business Question

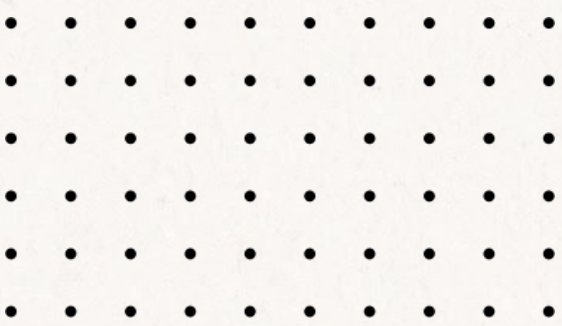
Does performance drive fan following?

## Recommendation

Focus marketing efforts on mid-tier teams with large followings

## Prediction

Improved fan engagement + revenue growth





# API Diagnostic Analytics SQL Query

## Insight

Big Performance ≠ Big Popularity

## Business Question

Who’s under-followed or over-followed?

## Recommendation

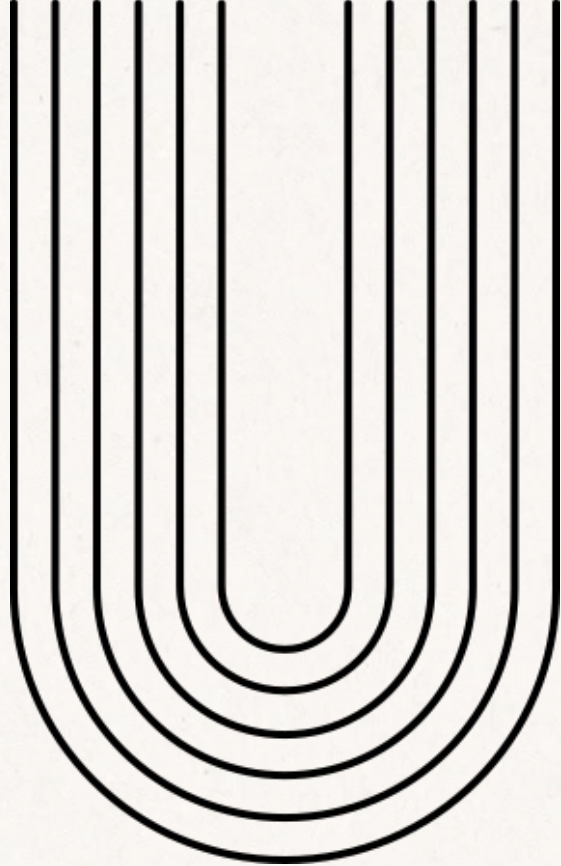
Support overachieving teams with media spend

## Prediction

Boost ROI from targeted outreach







# Web-Scraped Data Source



## Source

*ESPN NBA Scoreboard*  
*(April 13, 2025)*



## Job Relevance

*BeautifulSoup scraping*  
*simulates collecting real data*



## Collected

*Matchups, team*  
*scores, results*



## Pipeline

*Web Scrape → Clean → PostgreSQL*



# Web-Scraped Descriptive Analytics

## SQL Query

### Insight

Clout sells jerseys more than wins

### Business Question

What drives jersey sales?

### Recommendation

Focus merchandising on popular players

### Prediction

Increase in jersey revenue





# Web-Scraped Analytics SQL Query

## Insight

Fan attendance follows long-term success

## Business Question

What sustains attendance?

## Recommendation

Boost in-arena engagement for rising teams

## Prediction

Growth in ticket + local sales





# Why me?

**Full-stack pipeline builder**

**Great communicator +  
analyst**

**Ready for hands-on impact**

## Summary:

**Extracted raw data using API  
+ web scraping**

**Cleaned data and loaded it  
into a database**

**Generated real business  
insights with SQL**

**Created data visualizations  
reflecting my insights**