

# Sports Statistics

## Betting Data

*Where to get it:*

- Odds Portal: <http://www.oddsportal.com/>
- Betfair: <http://data.betfair.com/> - but you have to bet, which at the moment requires not being in the United States
- Fracsoft: <http://www.fracsoft.com/> - historical Betfair data, with more details, but extra cost
- Scraping gambling websites:
  - Research the bookmaker. Know what their specialties are.
  - Really depends on the sport.

*What to look out for:*

- Different types of bookmakers.
  - Peer-vs-peer gambling
  - Traditional bookmakers
- House effect (or the bookmaker's cut or vig)
- When the bets were taken.

*Best Bet:*

- Talk to people inside of the business.
- Talk to statisticians. (Lots of academics doing work with gambling markets.)
- Talk to trade groups. Both inside and watching the industry.

## The Tennis Racket

- <https://www.buzzfeed.com/heidiblake/the-tennis-racket>
- <https://www.buzzfeed.com/johntemplon/how-we-used-data-to-investigate-match-fixing-in-tennis>
- <https://github.com/BuzzFeedNews/2016-01-tennis-betting-analysis>

## Rolling Your Own Data

Sometimes you're not going to have the right data for what you want to do, but often whatever body runs the sport releases a lot of valuable public data. You just have to know where to look and how to scrape it.

NCAA: <http://stats.ncaa.org/>

You can scrape the boxscores and play-by-play for every basketball game. And do things like:

- Calculate how receives each assist from a player:  
<http://www.nycbuckets.com/2014/03/breaking-jason-brickmans-1000-assists/>
- Figure out how efficient a team is when players are on and off the court:  
<http://www.nycbuckets.com/2017/02/nyc-buckets-nec-end-season-awards-conference-teams/>

### Professional Leagues:

- **Major League Baseball:** <http://gd2.mlb.com/components/game/mlb/>
- **National Basketball Association:** <http://stats.nba.com/>
  - Note: This is actually an API. For instance, if you wanted every shot Russell Westbrook has taken this season:  
<http://stats.nba.com/stats/shotchartdetail?Period=0&VsConference=&LeagueID=00&LastNGames=0&TeamID=0&PlayerPosition=&Location=&Outcome=&ContextMeasure=FGA&DateFrom=&StartPeriod=&DateTo=&OpponentTeamID=0&ContextFilter=&RangeType=&Season=2016-17&AheadBehind=&PlayerID=201566&EndRange=&VsDivision=&PointDiff=&RookieYear=&GameSegment=&Month=0&ClutchTime=&StartRange=&EndPeriod=&SeasonType=Regular+Season&SeasonSegment=&GameID=>
- **Major League Soccer:**  
<http://matchcenter.mlssoccer.com/matchcenter/2017-02-23-fc-dallas-vs-arabe-unido/boxscore>
  - The boxscores in the GameCenter contain the XY coordinate of every shot taken during the game, which can provide some extra context.
  - It's worth noting that other providers, such as Opta, have even deeper data, with easier access tools, but it costs \$\$\$.

### International Organizations:

My colleague Peter Aldhous downloaded data from IAAF and FINA to produce this story:  
<https://www.buzzfeed.com/peteraldhous/faster-higher-stronger-not>. You can see the data analysis on Github: <https://github.com/BuzzFeedNews/2016-07-athletic-performances>