



# IDENTIFYING UNDervalUED BASEBALL CARDS IN A BOOMING MARKET

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# UNDERSTANDING THE PROBLEM

## Sports Card Boom

Young Prospects: 1st Spike

Hall-of-Famers: 2nd Spike

Future HOFers: Next Wave??

## Who Should You Buy?

Find established veterans with  
HOF-esque career trajectories

Find Undervalued Flagship RCs  
Using HOF Comparison\*



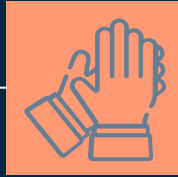
\* A player's  
flagship rookie  
card, in this case,  
refers to the  
player's "main" or  
most identifiable  
rookie

# THE PROCESS – OSEMN



01

Obtain  
Data



02

Scrub  
Data



03

Explore  
Data



04

Modeling



05

Interpret

# THE DATA

Obtained From Baseball Reference  
(Stat Head)

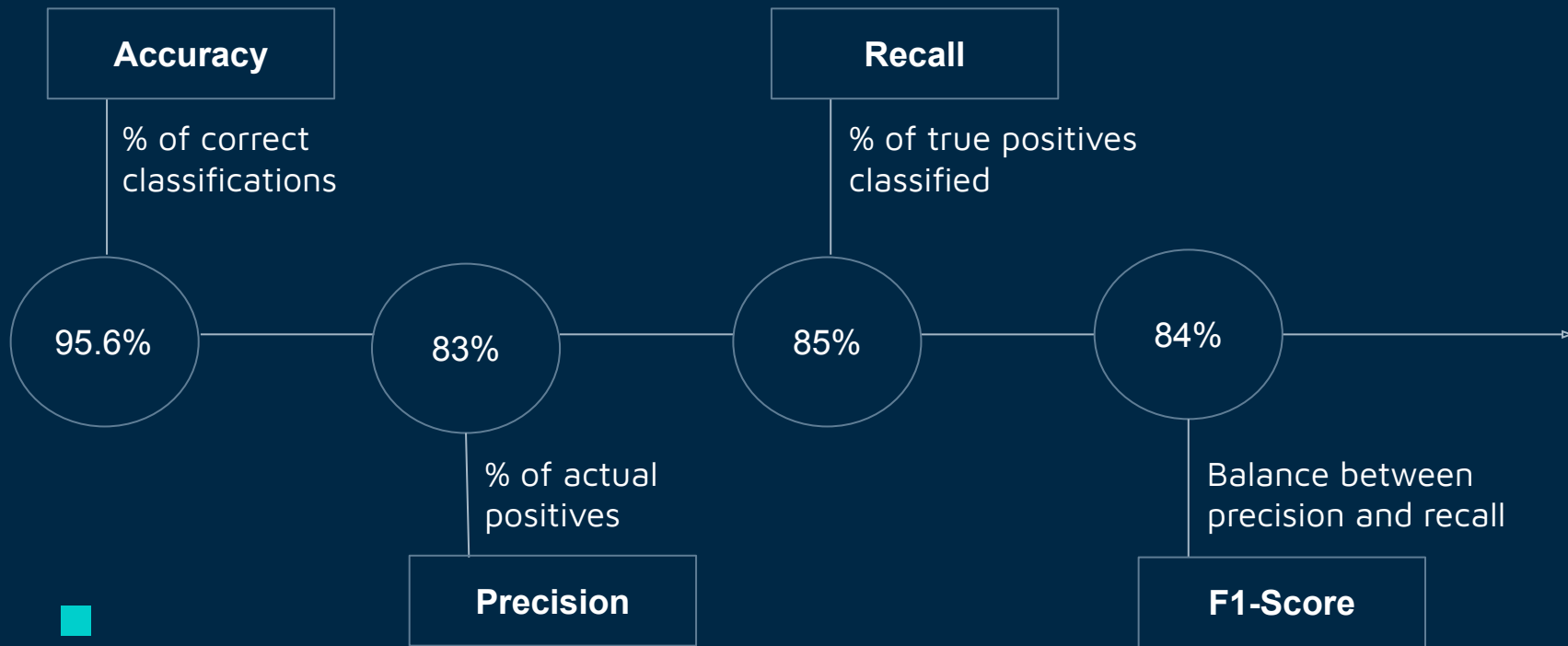
All Hall-of-Famers (197), Retired  
All-Stars (770), Active All-Stars (136)

1103 Total players



# THE MODEL

## XGBoost Model:

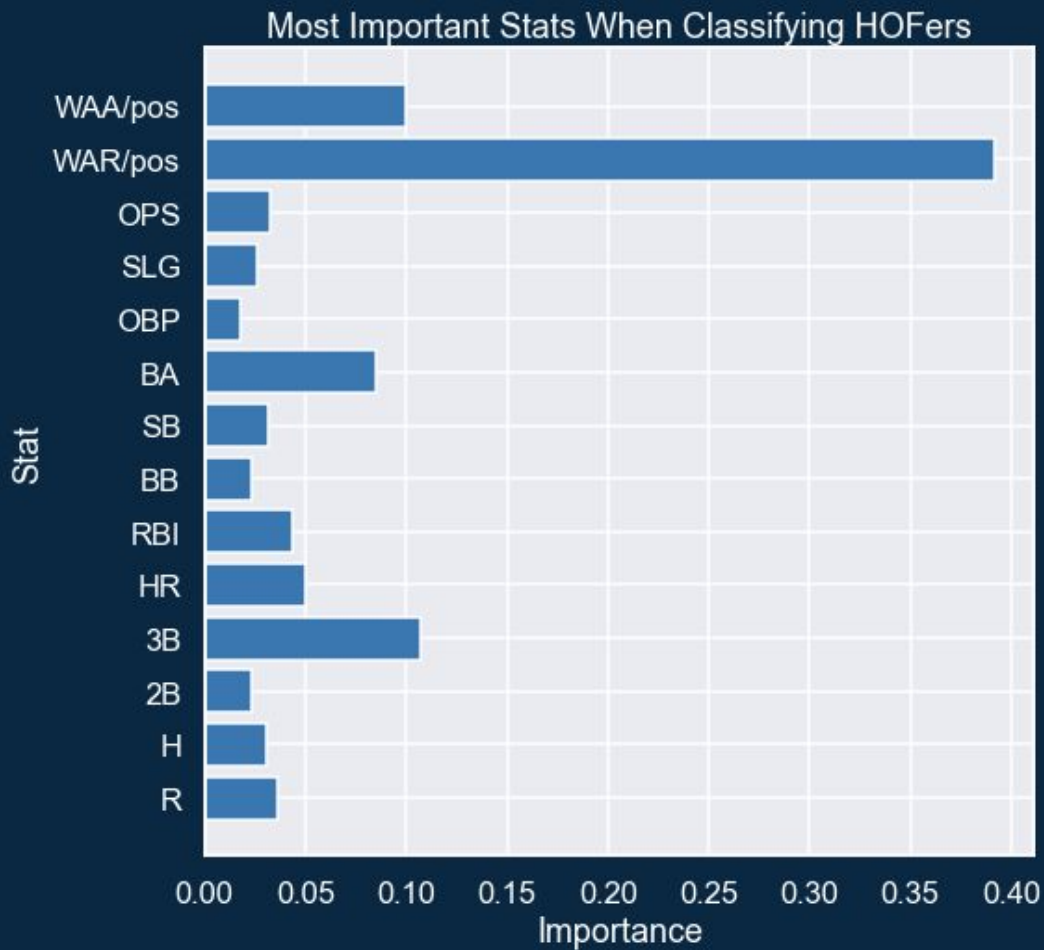


# THE RESULTS

## Which Stats are Most Important?

**WAR/pos** (Wins Above Replacement) is overwhelmingly most important

**WAA/pos** (Wins Above Average), **BA** (Batting Average), **3B** (Triples) are the three secondary stats



# OUR RECOMMENDATIONS

## How we decided:

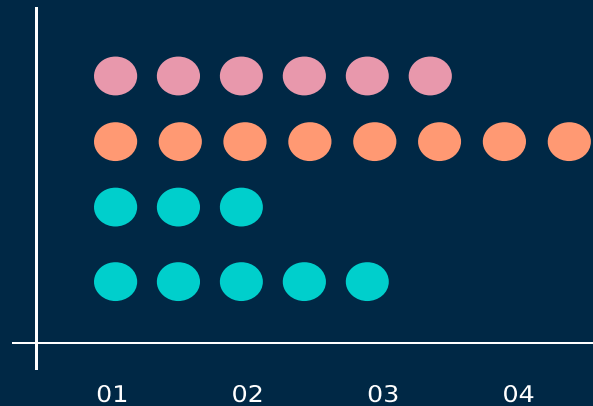
Project career numbers until average retirement age for each player

Predicted “Hall-of-Famers” using model

Identified undervalued players

Compared prices to HOF player with similar statistics

\*These investments represent potential ceilings and are not guaranteed





# OUR RECOMMENDATIONS

\*Average of last 3 eBay sales as of 2/12/2021



Trevor Story

2016 Topps Chrome  
PSA 10  
\$80.52

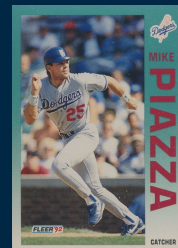


ROI: 331%



Mike Piazza

1992 Fleer PSA 10  
\$346.69

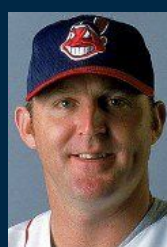


Pete Alonso

2019 Topps PSA 10  
\$47.20

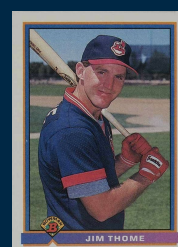


ROI: 185%



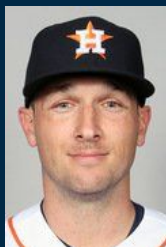
Jim Thome

1991 Bowman PSA 10  
\$135.16



Alex Bregman

2017 Topps PSA 10  
\$39.33

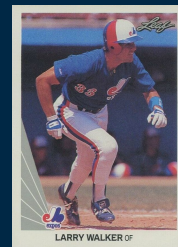


ROI: 236%



Larry Walker

1990 Leaf PSA 10  
\$132.33





# FUTURE WORK

## 162-GAME DATA MODEL



Mapping projections  
based on average  
stats per full season

## ERA-BASED MODEL



Accounts for  
changes to the game  
of baseball over the  
years

## RISK ASSESSMENT



Finding potential  
floors if careers do  
not pan out (injury,  
decline, etc.)

Do you have any questions?

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# THANK YOU!



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