

Who will live the dream?

Predicting which minor leaguers will make the majors

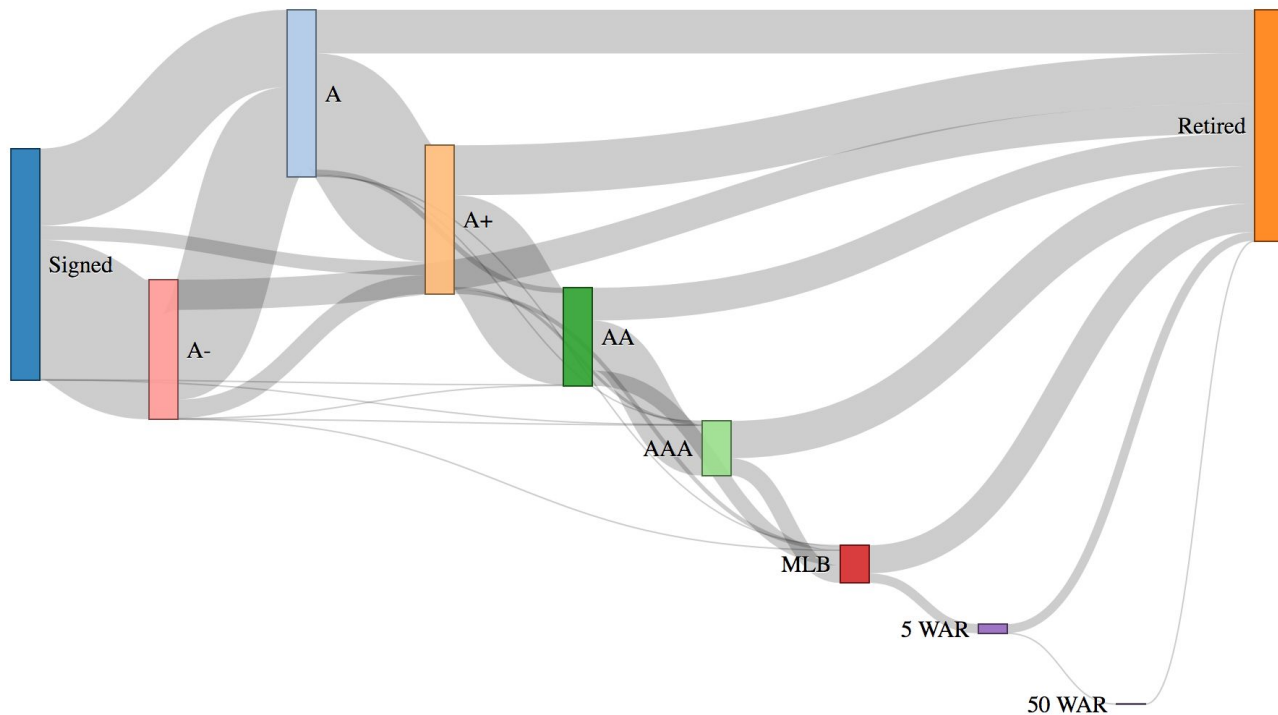
Mitchell Lee
August 8, 2017
Metis

Motivation



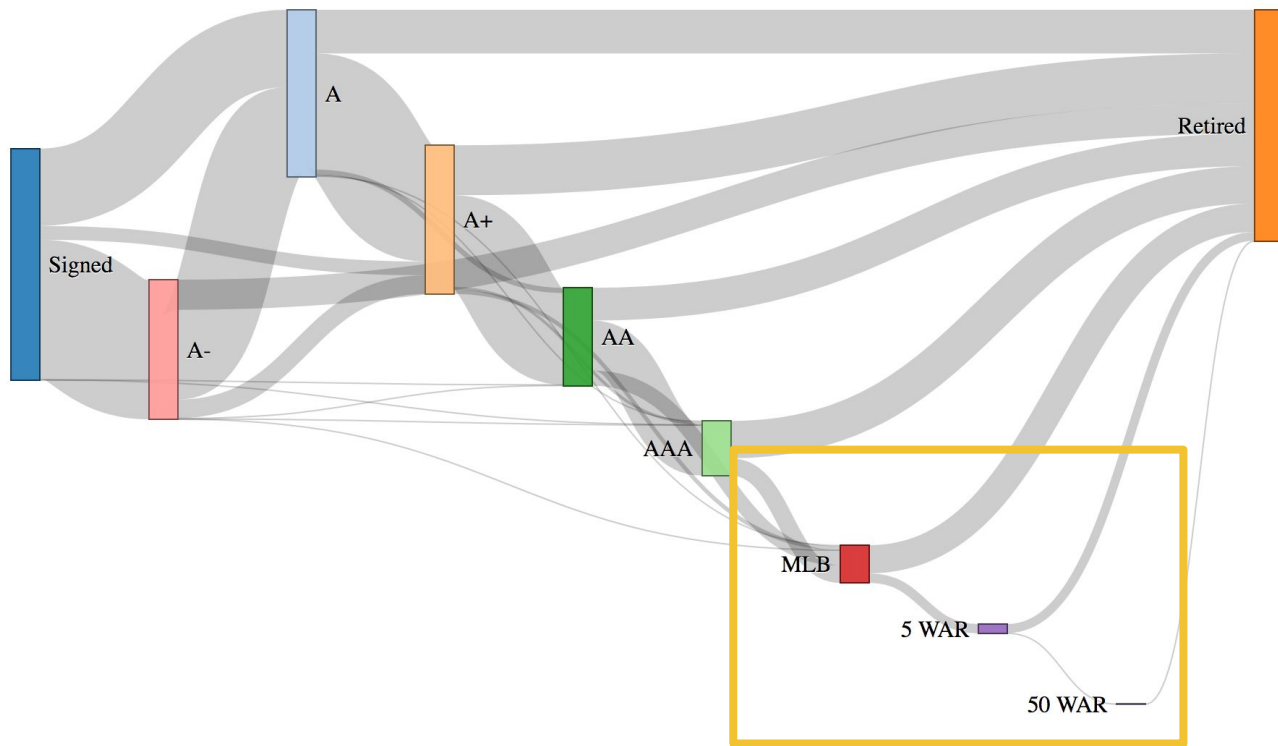
Motivation

Low “Graduation” Rate



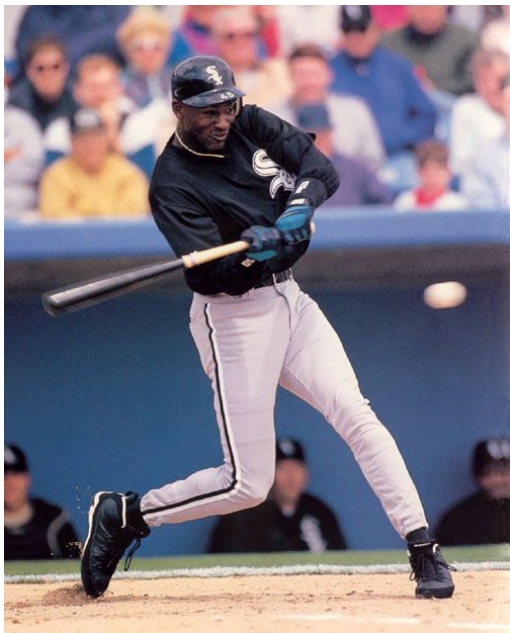
Motivation

Low “Graduation” Rate



Problem Statement Refinement

Look only at “upper levels”



- AAA
 - AA
 - A+
 - A
 - A-
-
- Advanced Rookie
 - Rookie
 - Foreign Rookie

Data Processing

- All batters in “upper” minors between 1990 and 2011
- Second season (first scout-able)
- Did not reach majors during season
- $PA > 150$

(~7k players)

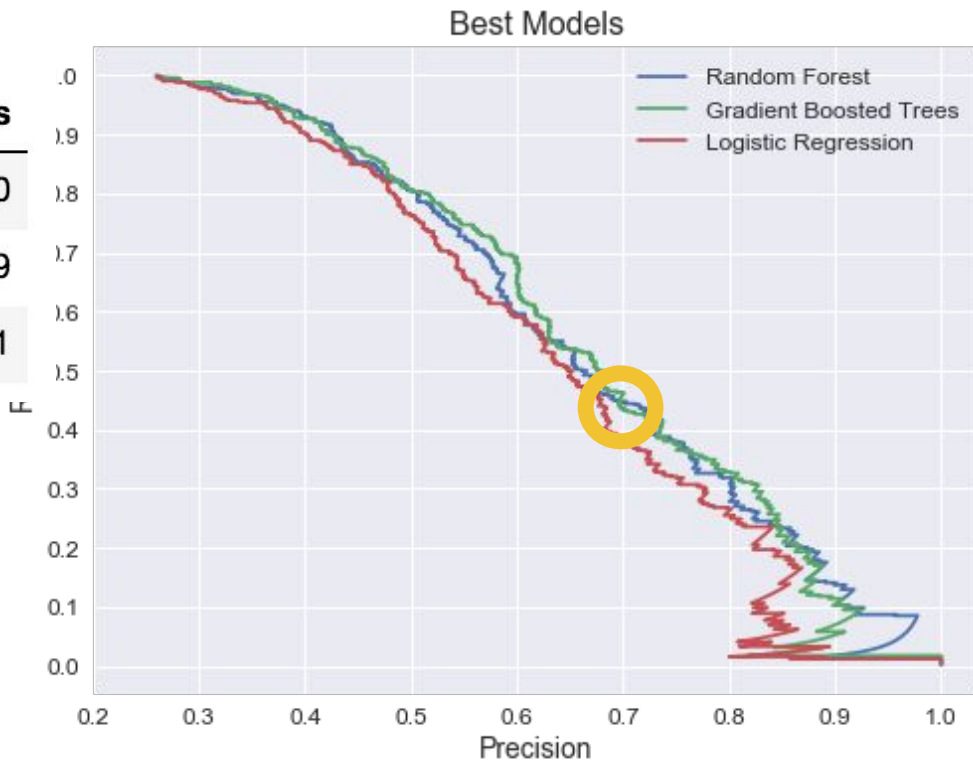


BeautifulSoup

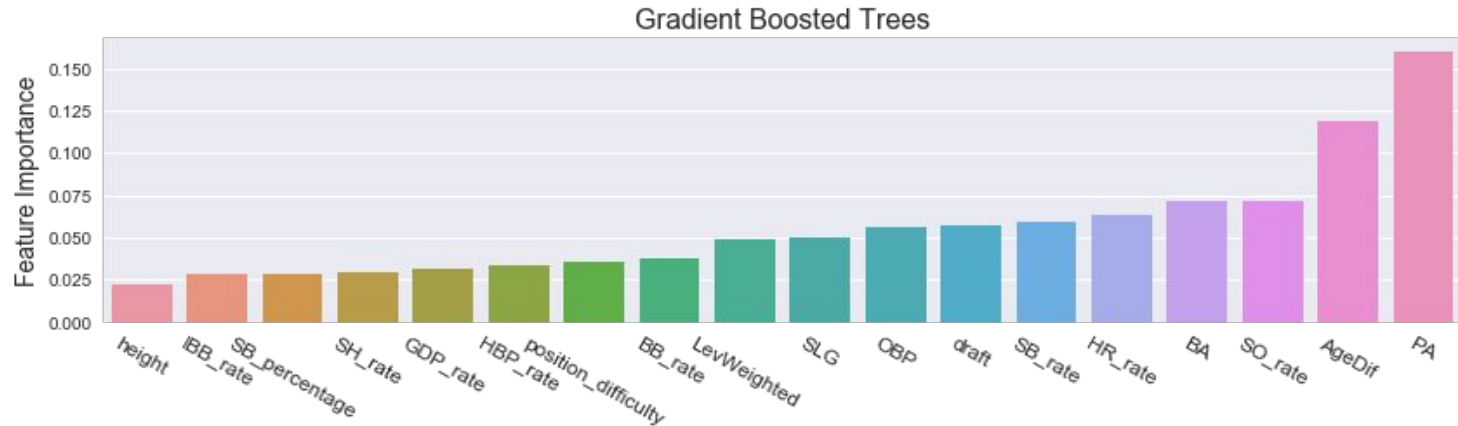
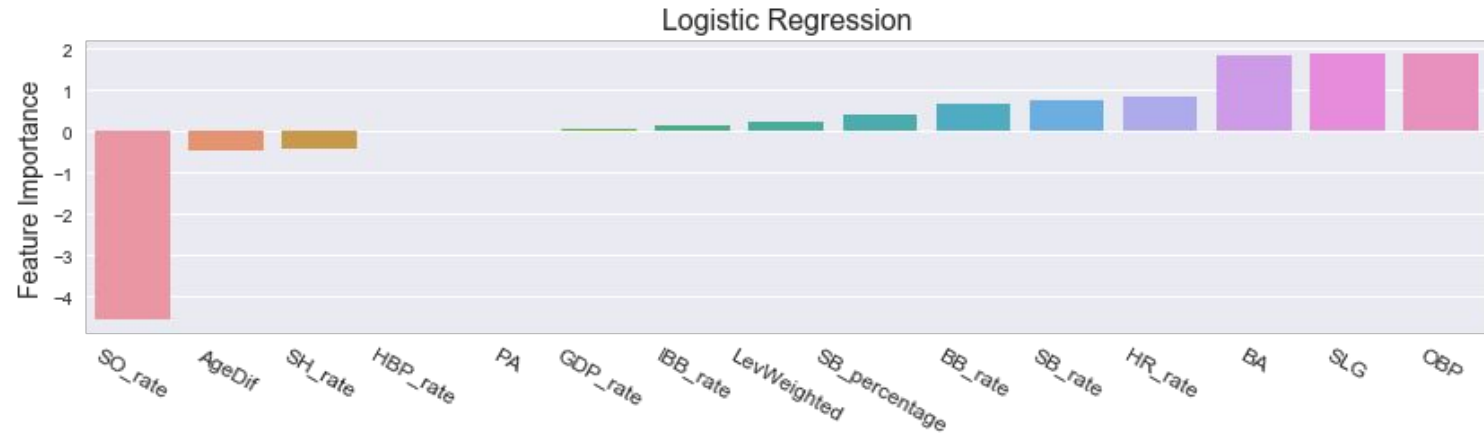


Models: Predicting Major League Appearance

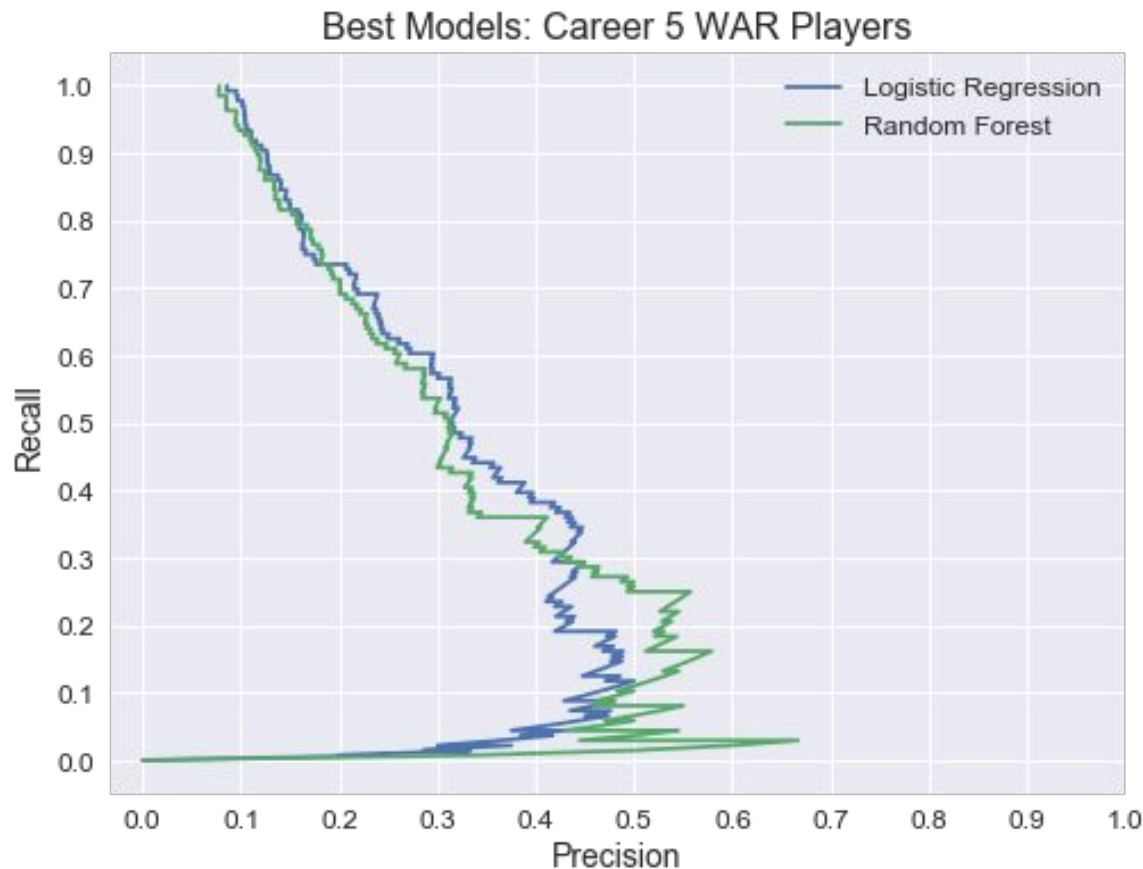
	precision	recall	logloss
Random Forest	0.73	0.44	0.40
Gradient Boosted Trees	0.72	0.48	0.39
Logistic Regression	0.70	0.43	0.41



Feature Importance



Can I predict Good Players?



Thank you



Motivation

Low “Graduation” Rate

