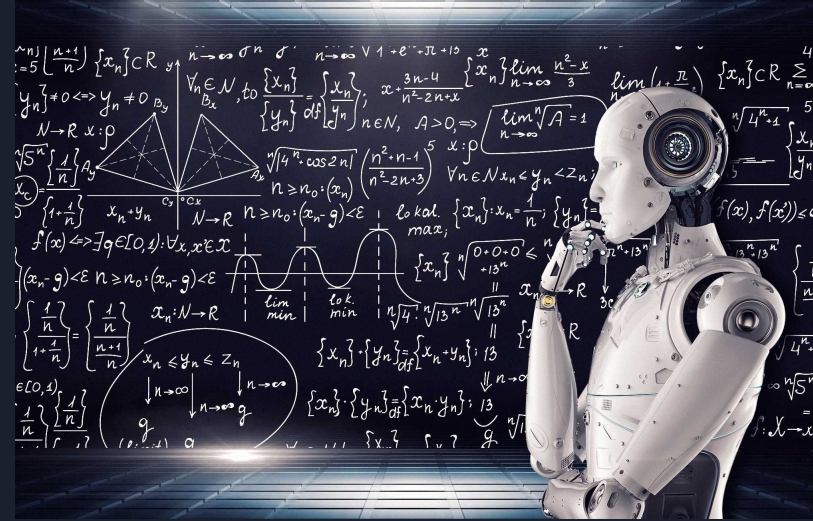


Predicting the Paycheck

An a machine learning model for FIFA player Salaries

By Jon Cowart



The Problem

A's

A'S WIN 20 IN A ROW IN 2002



The Data

- From Kaggle Sports Data Collection
- 24 Features
- 3 Main Categories of Features:
 - Body
 - Skillset
 - Position



BARCELONA PLAYER'S RATINGS

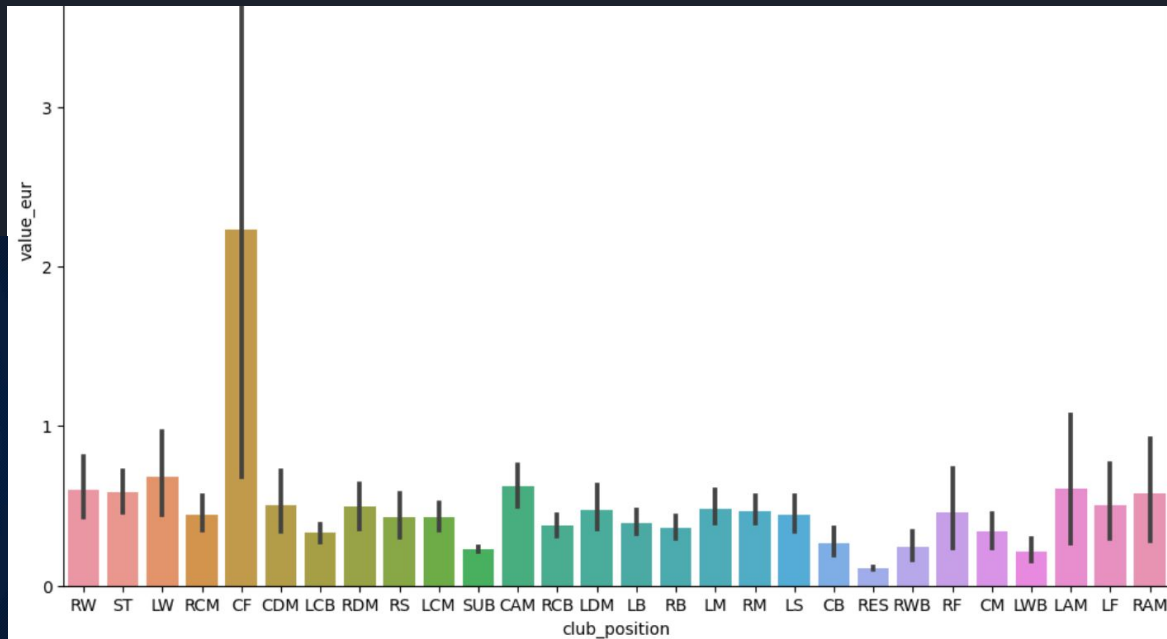


FIFA 22 RATINGS PREDICTIONS

overall
potential
value_eur
age
height_cm
weight_kg
club_team_id
league_level
club_position
work_rate
body_type
pace
shooting
passing
dribbling
defending
attacking_finishing
skill_dribbling
skill_curve
movement_acceleration
movement_sprint_speed
power_shot_power
power_long_shots
mentality_aggression
defending_marking_awareness

Key Finding #1 - Position Matters

- The highest paid players by far are Center Forwards.
- Also known as “The 9”, this is one of the most important and iconic positions in soccer.
- These are your primary goal scorers.

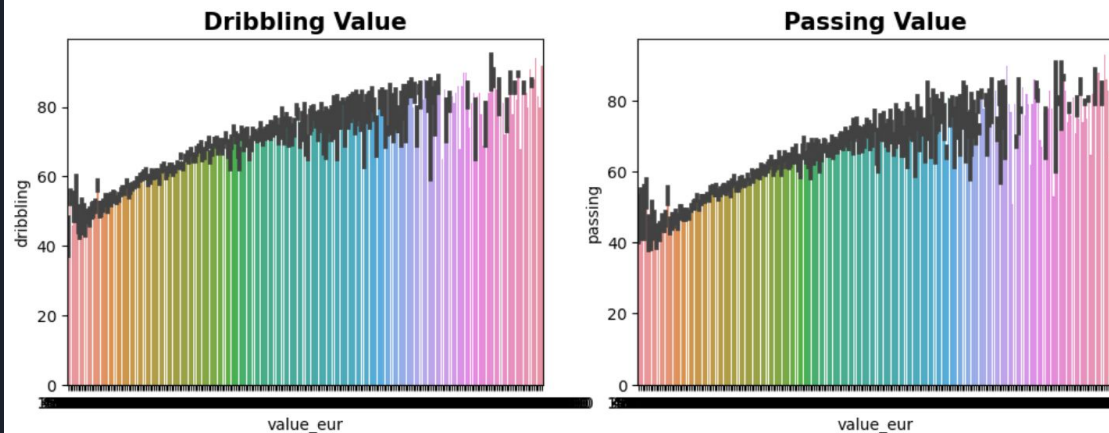


Key Finding #2 - Dribbling and Passing are the most valuable skills

- There was a strong correlation between the dribbling/passing skills and value in euros.
- Shooting and scoring was ranked lower.
- Defense was the lowest rated skillset.



Value of Skills



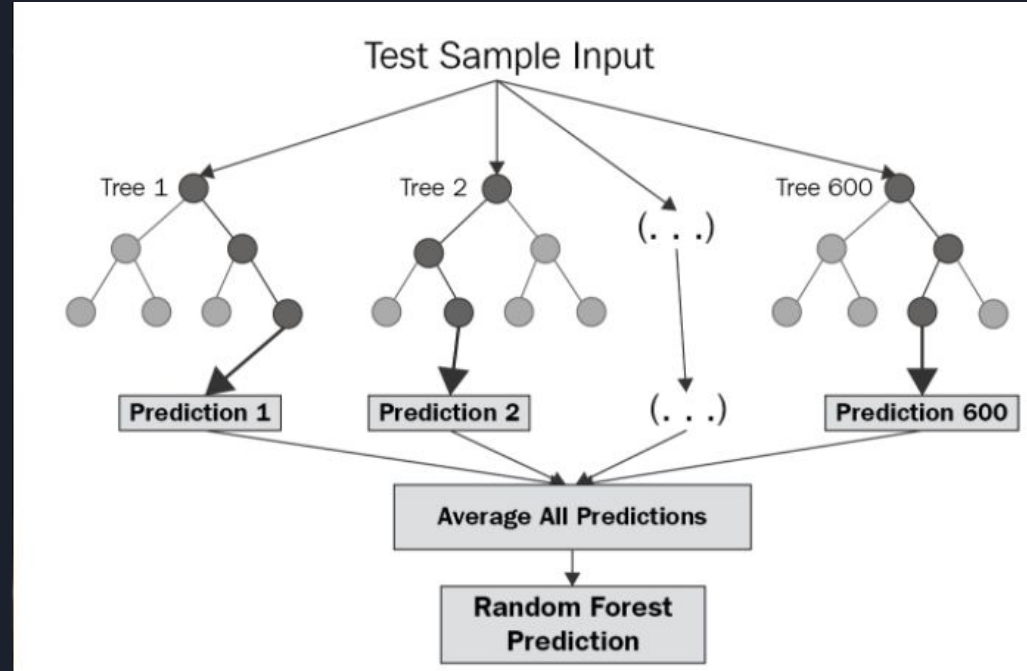
The Model - Random Forest

Strengths:

- Random Forest models is a combination of several predictions, giving it more input from different perspectives.

MAE - €142,220

- The MAE score tells me essentially how far away, in euros, my model is from predicting a player's actual worth. In this case, €142,220 seems like a lot to me (cries in poor), but is actually a small number considering we are talking about hundreds of millions of euros for top talent.



The Model - Random Forest

Limitations:

- These are video game rankings, not actual rankings.
- Doesn't take into account leagues and clubs.
- Soccer metrics do not mesh as well with data analytics as baseball metrics. Soccer players aren't as distinct as baseball players.



Recommendations:

If you are a club:

- Value dribbling and passing over all else.
- Pay your center forward

If you are a player:

- Practice your dribbling and passing.
- Try to play center forward

