



Premier League scouting for Feyenoord

Cloud Technologies and Big Data Frameworks part 2

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**Premier
League**

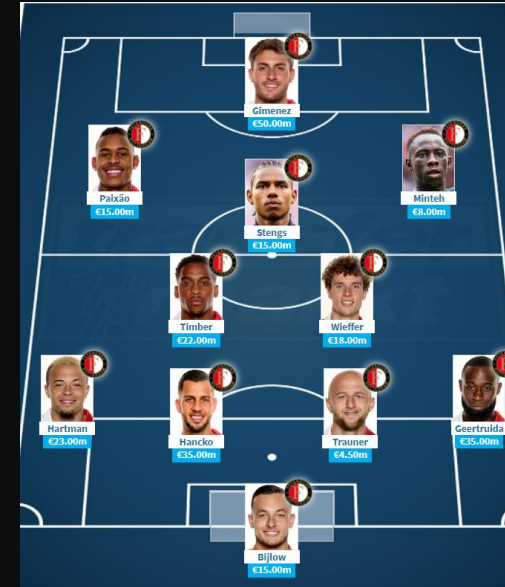


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Introduction of Feyenoord

- Football club from Rotterdam, The Netherlands
- Founded in 1908
- Recent success under head coach Arne Slot
- Key aspects of Feyenoord's play style
 - High pressure tactics
 - Zonal pressing approach
 - Adaptability and strategic consistency



English Premier League 2022- 2023 Season Stats Dataset

- Consists of category-based detailed statistics of each player in the Premier League
- Source: Kaggle
(<https://www.kaggle.com/datasets/mechatronixs/english-premier-league-22-23-season-stats>)
- Original Data Source: FBref
(<https://fbref.com/en/comps/9/2022-2023/stats/2022-2023-Premier-League-Stats>)



Three dataframes

1. Forwards dataframe: used for scouting a replacement for current striker Santiago Giménez
2. Dutch players dataframe: used for scouting players who are more likely to feel at home in The Netherlands
3. Young players dataframe (<21): used for scouting players who can develop at Feyenoord

Queries



Finding a Santiago Giménez replacement

Compared Santi's statistics with Premier League forwards to find similar players



Most interesting Dutch players

Ranked Dutch players based on performance metric and age



Age distribution of young players (under 21):

Grouped the young players by age and counted the number of players in each group



Average matches played per age group:

Calculated the average matches played for each age group

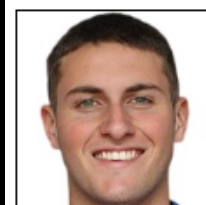


Scatter plot comparing age with experience

Selected columns 'Player', 'Age', and 'Match_Play' of young players and sorted them by the number of matches played in descending order

Scouting a replacement for Giménez

- High probability of Santiago Giménez leaving
- We're looking for a player with similar statistics that immediately can take over his position in the team
- Based on similarity, these are the top 5 candidates from the Premier League



Santiago Giménez

Santiago Tomás Giménez

Position: FW • **Footed:** Left

182cm, 59kg (5-11½, 132lb)

Born: [April 18](#), 2001 (Age: 22-297d) in Argentina, Argentina

National Team: [Mexico](#)  *Other:* [Argentina](#) 

Club: [Feyenoord](#)

2023-2024	MP	Min	GS	Ast	xG	npG	xAG	SCA	GCA
Eredivisie	20	1637	19	4	17.5	15.1	3.0	44	8

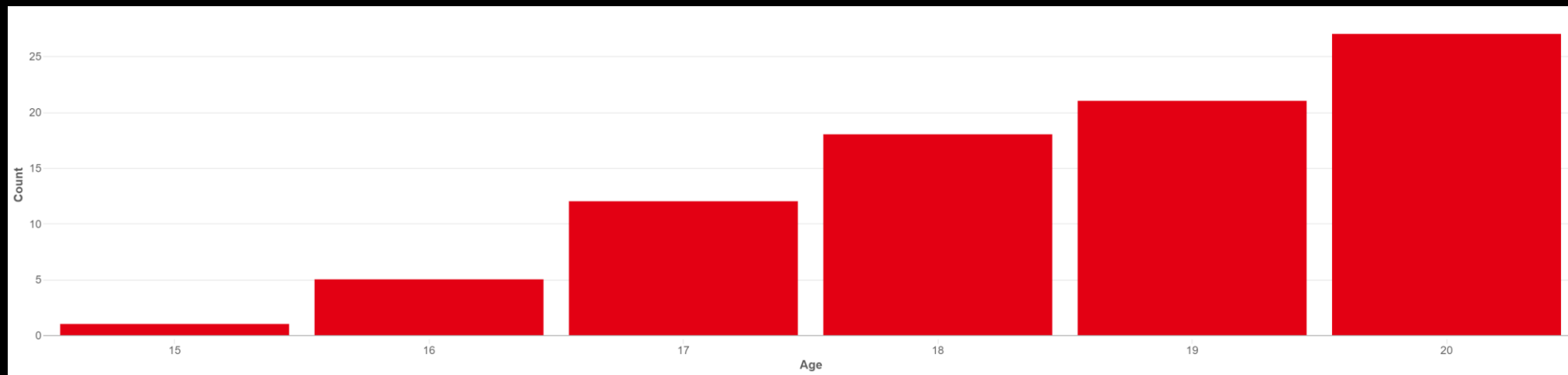
#	Player	Nation	Pos	Squad	Age	Goals	Assist	xG	NoPen_xG	xAG
1	Callum Wilson	ENG	FW	Newcastle Utd	30	18	5	17.50	15.10	2.70
2	Marcus Rashford	ENG	FW	Manchester Utd	24	17	5	15.40	15.40	3.40
3	Ivan Toney	ENG	FW	Brentford	26	20	4	18.70	13.20	5.10
4	Ollie Watkins	ENG	FW	Aston Villa	26	15	6	16.50	14.90	3.80
5	Aleksandar Mitrović	SRB	FW	Fulham	27	14	1	14.90	8.60	2.30

Scouting Dutch players

- Feyenoord is based in The Netherlands, the coach is Dutch and a lot of the staff is Dutch. A Dutch player will therefore (most likely) feel more at home compared to an international player
- I used the players statistics as performance metrics to make a ranking of the most interesting Dutch players for Feyenoord
- Based on these metrics and age, these are the top 10 candidates from the Premier League

#	Player	Pos	Squad
1	Joël Veltman	DF	Brighton
2	Crysencio Summerville	FW	Leeds United
3	Arnaut Danjuma	FW,MF	Tottenham
4	Cody Gakpo	FW,MF	Liverpool
5	Donny van de Beek	MF	Manchester Utd
6	Pascal Struijk	DF	Leeds United
7	Wout Weghorst	FW,MF	Manchester Utd
8	Sven Botman	DF	Newcastle Utd
9	Kenny Tete	DF	Fulham
10	Virgil van Dijk	DF	Liverpool

Age	Count
15	1
16	5
17	12
18	18
19	21
20	27



Age distribution of young players (under 21) in the Premier League

- Feyenoord has to work on a tight budget compared to teams from bigger competitions. This is why their focus is usually on younger players who can be developed into better players
- That's why it's interesting to analyse the younger players from the Premier League
- The visuals above display the age distribution of young players in the Premier League

Experience/playing time of the youngsters

- Young players with significant match experience could indicate their potential to become key players in the future
- Young players who aren't getting enough match time, could be interested in moving away from their respective clubs
- So both parties could be interesting players for Feyenoord, that's why a scatter plot (as shown below) focusing on matches played vs. age could be a useful visual for Feyenoord's scouting team

Age	Avg_Matches_Played
15	1
16	1
17	6
18	8
19	9
20	18





Thank you

Questions?

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