



*Chat with your
Football Scouter*

2022-2023 Football Player Stats (Kaggle)

2500 Players, 125 metrics

Tabular Data



Text Format



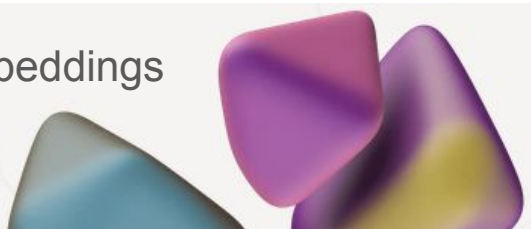
Embedding Vector

	Player	Nation	Pos	Squad	Comp	Age	Born	MP	Starts	Min	...	TkIW	PKwon	PKcon	OG	Recov	AerWon	AerLost	AerWon%	Position Category
0	Oliver Abildgaard	DEN	MF	Hellas Verona	Serie A	26	1996	1	0	11	...	10.00	0.0	0.0	0.0	10.00	0.0	10.00	0.0	MF
1	Abner	BRA	DF	Betis	La Liga	22	2000	4	3	272	...	2.33	0.0	0.0	0.0	6.00	1.0	2.00	33.3	DF
2	Mohamed Achi	FRA	FW	Nantes	Ligue 1	21	2002	2	0	36	...	2.50	0.0	0.0	0.0	5.00	0.0	0.00	0.0	FW
3	Martin Adeline	FRA	MFFW	Reims	Ligue 1	19	2003	5	0	107	...	2.50	0.0	0.0	0.0	9.17	5.0	4.17	54.5	MF
4	Yacine Adil	FRA	MFFW	Milan	Serie A	22	2000	4	1	116	...	2.31	0.0	0.0	0.0	3.85	0.0	2.31	0.0	MF

5 rows x 125 columns

125
{'report': "Fld-Fouls drawn: 0.0, Squad-Squad's name: Hellas Verona, Carries-Number of times the player controlled the ball with their feet: 10.0, PasTotCmpk-Pass completion percentage: 66.7, Pos-Position: MF, PasBlocks-Blocked by the opponent who was standing in the path: 0.0, ScaPassLive-Completed live-ball passes that lead to a shot attempt: 0.0, PasCmp-Passes completed: 20.0, ScaFld-Fouls drawn that lead to a shot attempt: 0.0, GcaPass-Dead-Completed dead-ball passes that lead to a goal: 0.0, Min-Minutes played: 11, Sca-Shot-creating actions: 0.0, TkIDrPast-Number of times dribbled past by an opposing player: 0.0, Recov-Number of loose balls recovered: 10.0, Crs-Crosses: 0.0, PasTotCmp-Passes completed: 20.0, GcaPassLive-Completed live-ball passes that lead to a goal: 0.0, Tkl-Number of players tackled: 10.0, Starts-Matches started: 0, TklDef3rd-Tackles in defensive 1/3 of the pitch: 0.0, Nation-Player's nation: DEN, GcaFld-Fouls drawn that lead to a goal: 0.0, Born-Year of birth: 1996, ScaPassDead-Completed dead-ball passes that lead to a shot attempt: 0.0, ScaSh-Shots that lead to another shot attempt: 0.0, MP-Matches played: 1, TklWon-Tackles in which the tackler's team won possession of the ball: 10.0, Age-Player's age: 26, CarPrpDist-Total distance, in yards, a player moved the ball while controlling it with their feet towards the opponent's goal: 0.0, Blocks-Number of times blocking the ball by standing in its path: 0.0, CarTotDist-Total distance, in yards, a player moved the ball while controlling it with their feet, in any direction: 0.0, TklDrk-Percentage of dribblers tackled: 0.0, PasTotPrpDist-Total distance, in yards, that completed passes have traveled towards the opponent's goal: 90.0, Assists-Assists: 0.0, Player-Player's name: Oliver Abildgaard, PasOff-Offsides: 0.0, ScaDrib-

Cohere Embeddings



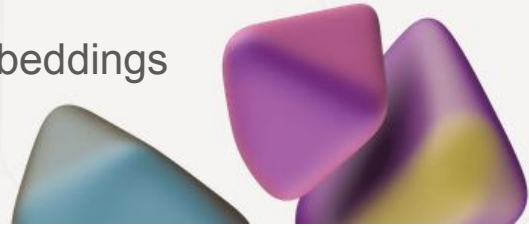
2022-2023 Football Player Stats (Kaggle)

Embedding Vector



Vectorstore

Cohere Embeddings



Indexes



Chat Feature

Chat Compare Players

Chatbot

Tell me about Lionel Messi

Lionel Messi is an Argentine footballer who is considered one of the greatest players of the modern generation, touted as the successor of Diego Maradona due to his goal-scoring prowess and exceptional ball control. Messi was born in 1987 in Rosario, Argentina to a working-class family and discovered his love for football at a young age. His talent was quickly recognised and led to a trial with Barcelona after he was diagnosed with growth hormone deficiency at the age of 11. Messi's trial proved successful, and he was offered a contract by Barcelona to cover his medical expenses, a testament to his skill and ability.

Messi has gone on to achieve immense success in his career, winning numerous awards and honours, including the Ballon d'Or seven times, the FIFA World Player of the Year five times, and leading his country Argentina to win the 2022 FIFA World Cup. His skill, precision, and goal-scoring ability have earned him a loyal fanbase worldwide, and he is widely regarded as one of the greatest soccer players of all time.

What is his estimated market value so far |

Submit

Chat Chain RAG Architect

LLMs : Cohere & ChatCohere

RAG : Cohere RAG Retrieval
+ Compressor : Cohere Rerank
= Compressor Retriever

LLM + Compressor Retriever + Memory
= Conversational Retrieval Chain

```
chat_model = ChatCohere(model="command-nightly")
llm = Cohere(model="command-nightly")

### Chat ###

rag = CohereRagRetriever(llm=chat_model)

compressor = CohereRerank(user_agent="langchain")

compressor_retriever = ContextualCompressionRetriever(
    base_compressor=compressor,
    base_retriever=rag
)

memory = ConversationBufferMemory(memory_key="chat_history",
                                   return_messages=True)

chat_chain = ConversationalRetrievalChain.from_llm(
    llm=llm,
    retriever=compressor_retriever,
    memory=memory,
)
```

Compare Player Feature

Chat Compare Players

Player 1

Lionel Messi

Player 2

Cristiano Ronaldo

Compare

Report (Based on Season 2020/2023)

Lionel Messi, a midfielder for Paris Saint-Germain, and Cristiano Ronaldo, a forward for Manchester United, are two outstanding players with remarkable abilities. Here is a comparison of some of their important characteristics based on the most recent season, 2022-2023:

1. Position: Messi is a midfielder, often known as an "attacking midfielder," whose main responsibilities include attacking and creating chances. Ronaldo, on the other hand, is a forward, frequently referred to as a "center forward," whose primary responsibility is to score goals.
2. Goals: During the 2022-2023 season, Messi scored 10 goals, while Ronaldo scored 4 goals.
3. Minutes Played: Messi has played 1577 minutes this season, while Ronaldo has played 525 minutes.
4. Shots: Messi has attempted 22 shots this season, whereas Ronaldo has attempted 13 shots.
5. Passes: Messi has completed 53 passes this season, compared to Ronaldo's 17.
6. Dribbling: Messi has successfully completed 0 dribbles this season, compared to Ronaldo's 0.
7. Fouls Drawn: Messi has drawn 1.0 fouls this season, whereas Ronaldo has not drawn any.
8. Assists: Messi has

Compare Player Chain RAG Architect

Retriever : Weaviate Hybrid Search

Prompt Template

Summarize Chain

```
# Retriever
retriever = WeaviateHybridSearchRetriever(
    client=client,
    index_name="Player",
    text_key="report",
    k=1,
    attributes=[],
    create_schema_if_missing=True,
)

# Sumarize Chain

sumarize_template = """You are an experienced professional scout.\n
Write a summarized analysis about some of the main given attributes
between the following two football players:\n
1. {player1}\n
2. {player2}\n

Do emphasize that the summary based on season 2022-2023.\n

Do not ask for any further questions when finished summary.\n

"""

sumarize_prompt = PromptTemplate(
    template=sumarize_template, input_variables=["player1", "player2"])

sumarize_chain = LLMChain(prompt=sumarize_prompt, llm=llm)
```

Compare Player Chain RAG Architect

Compare Chain

Input 1

Input 2

Summarize Chain

Output

```
# Compare Chain
compare_chain = (
    {
        'player1': lambda x: retriever.get_relevant_documents(
            x['player1'],
            where_filter={
                "path": ["player"],
                "operator": "Equal",
                "valueString": x['player1'],
            },
        ),
        'player2': lambda x: retriever.get_relevant_documents(
            x['player2'],
            where_filter={
                "path": ["player"],
                "operator": "Equal",
                "valueString": x['player2'],
            },
        )
    }
    | summarize_chain
    | {"output_text": lambda x: x["text"]}
)
```


DEMO

THANK YOU