



The Player Health Synchronization Engine

Submission For The Chelsea FC Data Vizathon

X @EdgeOfTheField

👤 @Jeffreyjose29



Health Synchronization Engine

A player workload monitoring system

The Chelsea FC Player Workload & Physical Capability Dashboard provides a comprehensive overview of player performance, tracking key metrics such as speed, heart rate, and distance using GPS data. It highlights priority work areas, monitors recovery trends, and evaluates physical capability through strength, agility, sprinting, and jumping assessments categorized by movement quality and force expression (Isometric/Dynamic). This data-driven approach enables the coaching staff to optimize training, prevent injuries, and enhance player performance throughout the season.

ⓘ
Development Info

ⓘ
Data Dictionary

→
View Insights

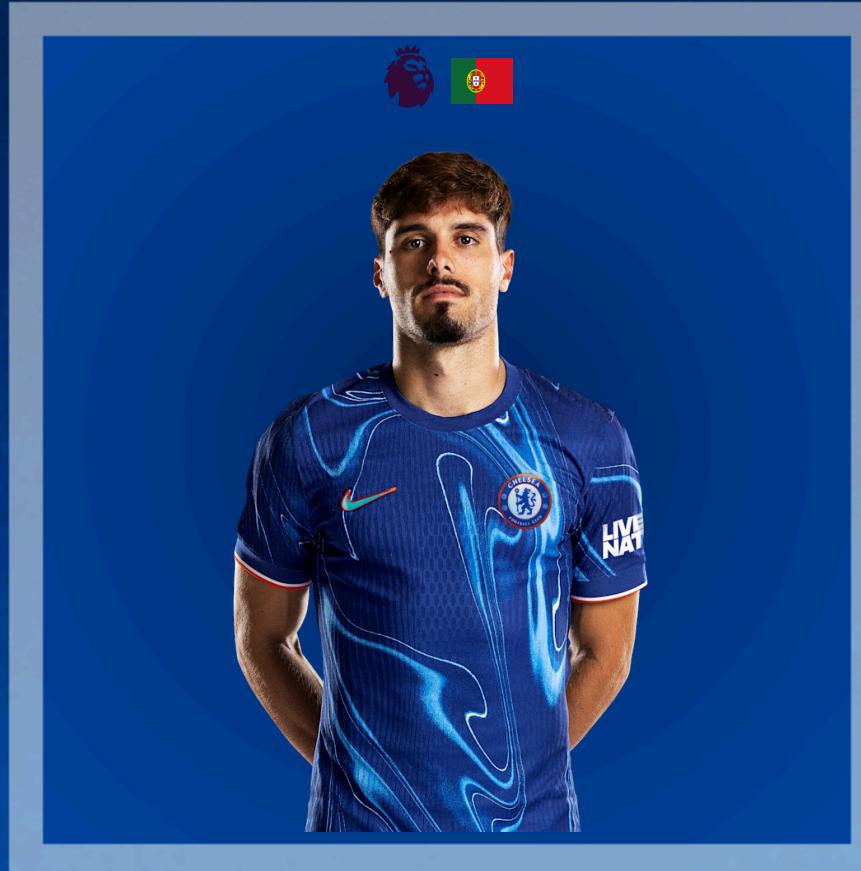
7 Pedro Neto

Winger

[Player Bio](#)

Player

Pedro Neto



Date of Birth

9 March, 2000 (age 25)

€50.0M

Market Value

GPS Monitoring

Physical
Capabilities

Priority Areas

Recovery



GPS Recording

Season

All

Session

All

Date

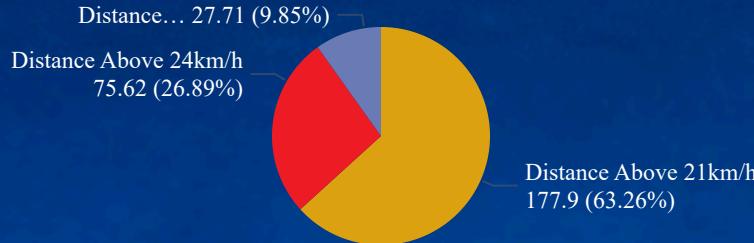
1/01/2021

31/12/2026

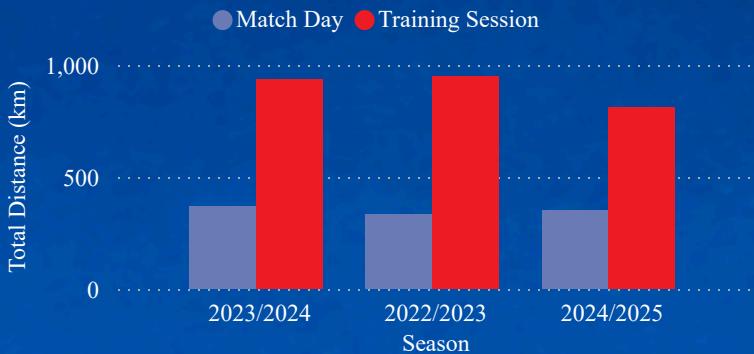
Distance

Total Distance (km)	Distance Above 21km/h	Distance Above 24km/h	Distance Above 27km/h
3.75K	177.90	75.62	27.71

Distance Speed Correlation



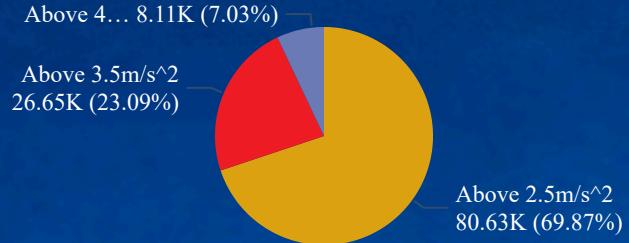
Total Distance Per Season



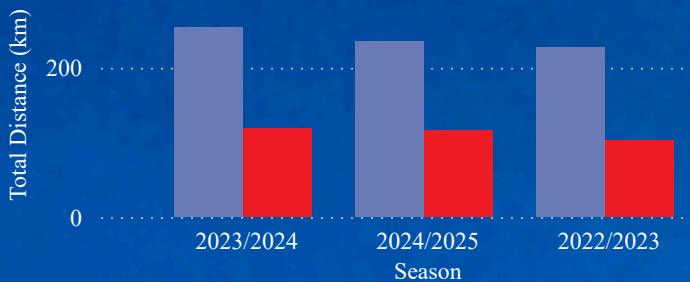
Speed

Num. Accel & Decel Above 2.5m/s ²	Num. Accel & Decel Above 3.5m/s ²	Num. Accel & Decel Above 4.5m/s ²
80.63K	26.65K	8.11K

Accelerations & Decelerations Breakdown



Average Accelerations & Decelerations Above 2.5m/s^2

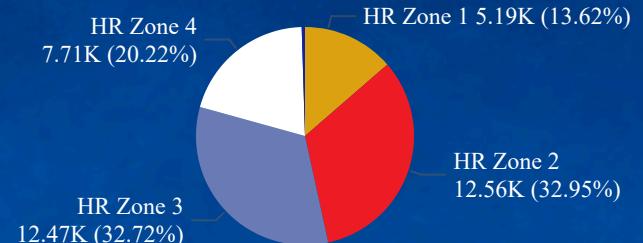


Heart Rate

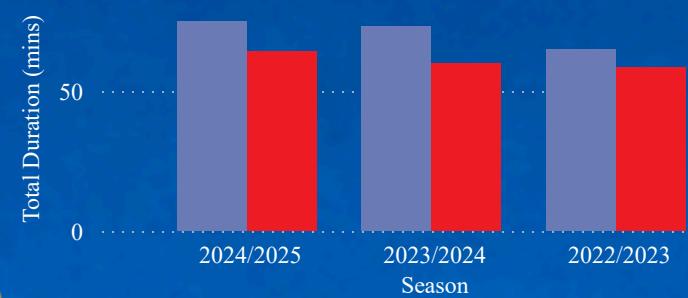
Total Duration (mins)

53.75K

Time In Heart Rate Zones (Mins)



Average Session Duration (Mins)





Physical Capabilities

Expression

All

Movement Type

All

Quality

All

Test Date

1/01/2021 31/12/2026

Latest Agility Benchmark (%)

0.97

Latest Jump Benchmark (%)

0.79

Latest Sprint Benchmark (%)

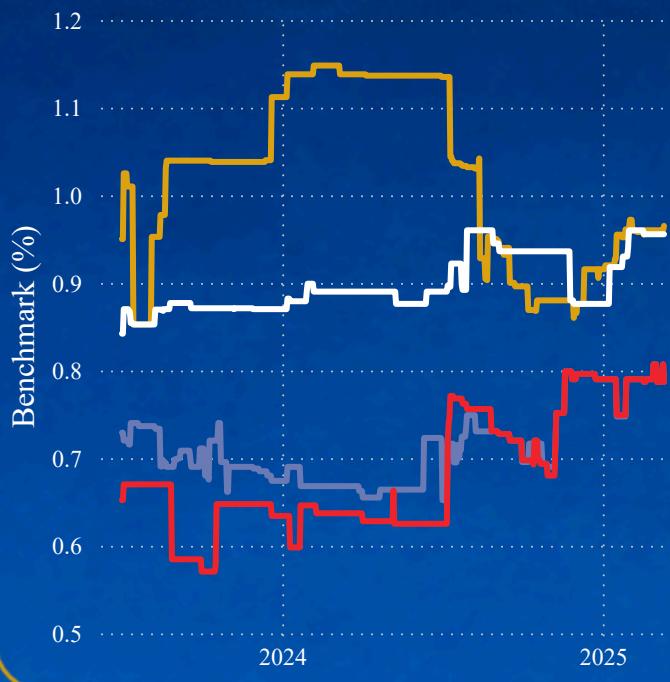
0.79

Latest Upper Body Benchmark (%)

0.96

Benchmark Improvement Per Movement

● Agility ● Jump ● Sprint ● Upper Body



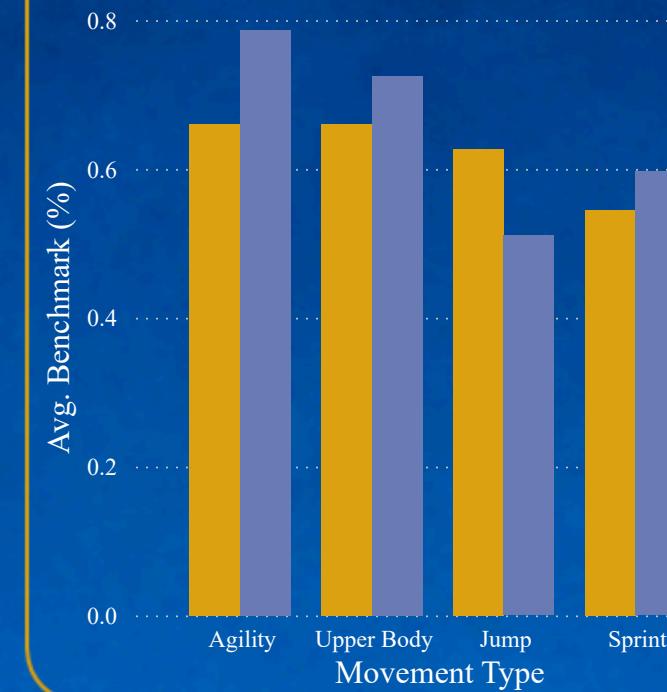
Test Date

Benchmark (%)

2/07/2023	0.63
3/07/2023	0.63
4/07/2023	0.64
5/07/2023	0.64
6/07/2023	0.64
7/07/2023	0.64
8/07/2023	0.64
9/07/2023	0.64
10/07/2023	0.64
11/07/2023	0.64
12/07/2023	0.65
13/07/2023	0.65
14/07/2023	0.65
15/07/2023	0.62
16/07/2023	0.62
17/07/2023	0.62
18/07/2023	0.62
19/07/2023	0.62
Total	0.64

Average Benchmark By Expression

● Dynamic ● Isometric





Priority Areas Monitoring

Category/Area

Priority

Tracking

Target Date

All

All

All

1/01/2021 31/12/2026



Priority	Category	Area	Target	Performance Type	Target set	Review Date	Tracking
1	Performance	Agility	Improve lateral movement speed by 10%	Outcome	Friday, 20 February 2026	Monday, 20 April 2026	Achieved
1	Performance	Shooting	Improve left-foot shot accuracy by 15%	Outcome	Saturday, 22 February 2025	Tuesday, 22 April 2025	Not Achieved
1	Performance	Strength	Increase deadlift max by 15kg	Outcome	Saturday, 2 November 2024	Thursday, 2 January 2025	Not Achieved
1	Recovery	Hydration	Drink 3L of water per day	Habit	Thursday, 1 February 2024	Monday, 1 April 2024	On Track
1	Recovery	Nutrition	Consume 150g protein daily	Habit	Sunday, 18 August 2024	Friday, 18 October 2024	On Track
1	Recovery	Nutrition	Consume 5 servings of vegetables daily	Habit	Monday, 12 May 2025	Saturday, 12 July 2025	Not Achieved
1	Recovery	Nutrition	Improve post-match recovery meals	Habit	Tuesday, 25 November 2025	Sunday, 25 January 2026	On Track
1	Recovery	Sleep	Increase average sleep by 1hr per night	Habit	Friday, 7 March 2025	Wednesday, 7 May 2025	On Track
1	Recovery	Sleep	Maintain consistent 8hr sleep schedule	Habit	Wednesday, 10 April 2024	Monday, 10 June 2024	On Track
1	Recovery	Sleep	No screens 1hr before bed	Habit	Friday, 15 August 2025	Wednesday, 15 October 2025	On Track
2	Performance	Agility	Complete agility drills 3x per week	Habit	Monday, 15 January 2024	Friday, 15 March 2024	Not Achieved
2	Performance	Agility	Reduce shuttle run time by 1 second	Outcome	Friday, 20 June 2025	Wednesday, 20 August	On Track



Player Recovery

Season

All

Complete/Composite

All

Metric

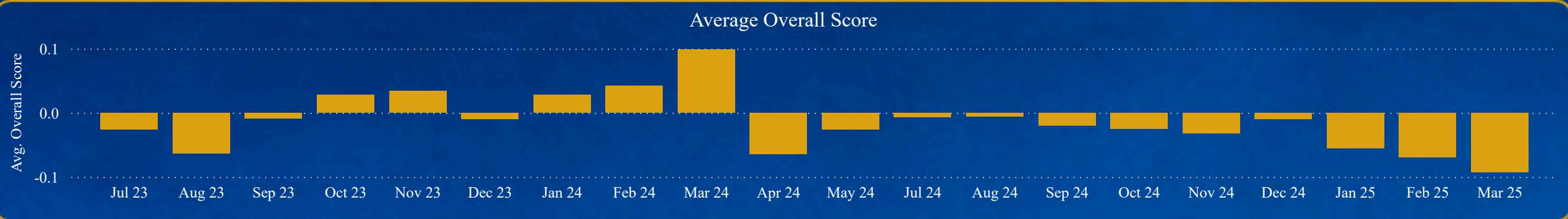
All

Session Date

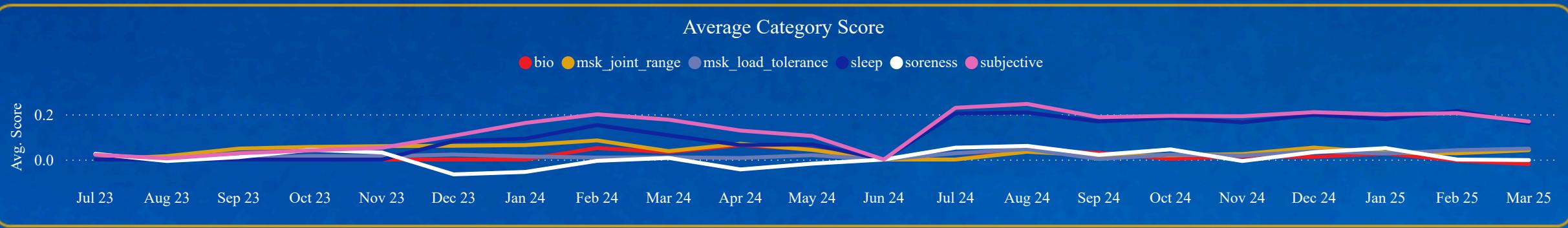
1/01/2021 31/12/2026



Average Overall Score



Average Category Score





Data Export

[GPS Data](#)[Priority Areas](#)[Physical Capability](#)

Test Date	Expression	Movement	Quality	Benchmark (%)
2/07/2023	Dynamic	Agility	Acceleration	0.36
2/07/2023	Dynamic	Agility	Deceleration	0.84
2/07/2023	Dynamic	Jump	Land	0.73
2/07/2023	Dynamic	Jump	Pre-Load	0.53
2/07/2023	Dynamic	Jump	Take Off	0.70
2/07/2023	Dynamic	Sprint	Acceleration	0.36
2/07/2023	Dynamic	Sprint	Max Velocity	0.65
2/07/2023	Dynamic	Upper Body	Pull	0.84
2/07/2023	Dynamic	Upper Body	Push	0.36
2/07/2023	Isometric	Agility	Acceleration	
2/07/2023	Isometric	Agility	Deceleration	0.95
2/07/2023	Isometric	Agility	Rotate	
2/07/2023	Isometric	Jump	Land	
2/07/2023	Isometric	Jump	Pre-Load	
2/07/2023	Isometric	Jump	Take Off	
2/07/2023	Isometric	Sprint	Acceleration	
2/07/2023	Isometric	Sprint	Max Velocity	
2/07/2023	Isometric	Upper Body	Grapple	