

# **AI in soccer to improve athlete performance**

Emma Brandes



# Examples of existing equipment

- [Dribble up](#) (soccer ball)
- [Playermaker](#) (wearable soccer tracker)
- [Apex](#) (GPS performance tracker)



# Dribble Up soccer ball

- Live classes
- Programs
- Drills
- Progress
- Leaderboards



# Playermaker

- Soccer specific stats
  - Tracks your technical game and physical game
- Progress over time
  - Monitor the trends of your stats and see how you are developing over your last 6 sessions
- Compare and benchmark
  - Compare yourself, friends, teammates and even to the elite. [Playermaker](#)



# How the Playermaker tracks progression

- Smart sensors
- Uno app



# What Playmaker Tracks

- **VOLUME**

- Distance Covered
- Sprint Distance
- Work Rate

- **INVOLVEMENT**

- Touches
- Ball Releases
- Possessions

- **PLAYING TEMPO**

- One Touch
- Short Possessions
- Long Possessions

- **TECHNICAL BALANCE**

- Touch by leg
- Receive by leg
- Max. Kicking velocity

- **SPEED**

- Top Speed
- Sprints
- Acceleration / Deceleration

# Apex Athlete Series

Similar to the Playmaker, however also

Real-time performance data at your fingertips to help you become fitter, faster and perform at a higher intensity.

Increase your max speed and sprint capacity, and test yourself against the pros.

The difference between you and everyone else is STATSports' Apex Athlete Series.



## **WHAT DOES IT MEASURE**

Apex Athlete Series measures the following metrics:

Total Distance, Distance Per Minute, High Speed Running (HSR), High Metabolic Load Distance (HMLD), Current Speed, Max Speed, Sprint Distance, No. of Sprints, Accelerations, Decelerations, Step Balance, Dynamic Stress Load (DSL), Current Heart Rate, Maximum Heart Rate, Average Heart Rate, Time in Red Zone, Calories



# How the Playermaker, Dribble Up Smart Ball, and Apex relate to Artificial intelligence

- Playermaker (When the data is collected from the sensors it is then converted uses artificial intelligence and machine learning algorithms to give stats from practices or games for coaches and players to use to get better.) [Premierfootball](#)
- Smart soccer ball (Unlike the playermaker the smart soccer ball doesn't have sensor with in the ball. The app on your phone scans the ball and then the app uses patterns to track the ball as it moves.) [Engadget](#)
- Apex (
- Where the sensors in the Playermaker, and Apex have to be recharged the smart soccer ball does not because it is app based.

# How these improve athlete performance



# References

<https://playermaker.com/pages/uno>

<https://www.engadget.com/2017-10-02-dribbleup-smart-soccer-ball.html>

<https://premierfootballuk.com/can-new-tech-company-playmaker-change-the-way-football-is-played/>