



**FOOTBOT**

a robotic training system for soccer players



# A ROBOTIC TRAINING SYSTEM FOR SOCCER PLAYERS





# WHAT IS FOOTBOT

Standing inside a tight circle in the middle of the cage the players must control and pass the ball through switching illuminating gates. FootBot system and software produce a deep analytical report of the player's performance, controlling the progress and reflecting on the strengths, abilities and weaknesses.







FOOTBOT contributed the promotion of 5 players from Academy to First Team in March 2018

Among them is Shapi Suleymanov – the youngest Russian player ever scored in European tournaments.

Academy's players price increased by 9 mln Euro price in 2019

Youth team won National Championship in 2018

First installation in 2016 for youth Academy

Bought two more after 6 months of usage and performance report (one more for the Academy and one for the First Team) ► Pass accuracy and speed significantly increased in 2018

Youth team became a national Champion for the first time in club's history in 2018





# CURRENT STATUS

## NUMBER OF INSTALLATIONS 5

### Clients



#### FC Kasnodar

- One of the best Russian Premier League team
- Most fast-growing Russian team
- 3 times Europe League participant
- This year national youth champions



#### Spanish National Team

- Practicing during FiFa World Cup 2018

### Business Development





Robotic 'Footbot' training simulator system applicable for footballers' fitness rating, control and improvement.

Objective: To design a football simulator system to secure progress of football players in a variety of aspects including: technical skills, complex responses, action accuracy, positioning skills, response speed, and physical fitness.

Methods and structure of the study: Sport Automatics Company incorporated in the Techno Park business-incubator of the Novosibirsk 'Academ Park' has developed the Ball Games Simulator (Model Patent #164165) that is applicable for football skills building purposes to address the above-discussed training issues.



The proposed robotic 'FootBot' simulator can be described as the training cage equipped with 4 ball shooting cannons in the center of each wall, with the shooting process controllable by the intensity, speed and trajectory. The trainee's task is to get, handle and shoot the ball on the illuminated target as quick as possible

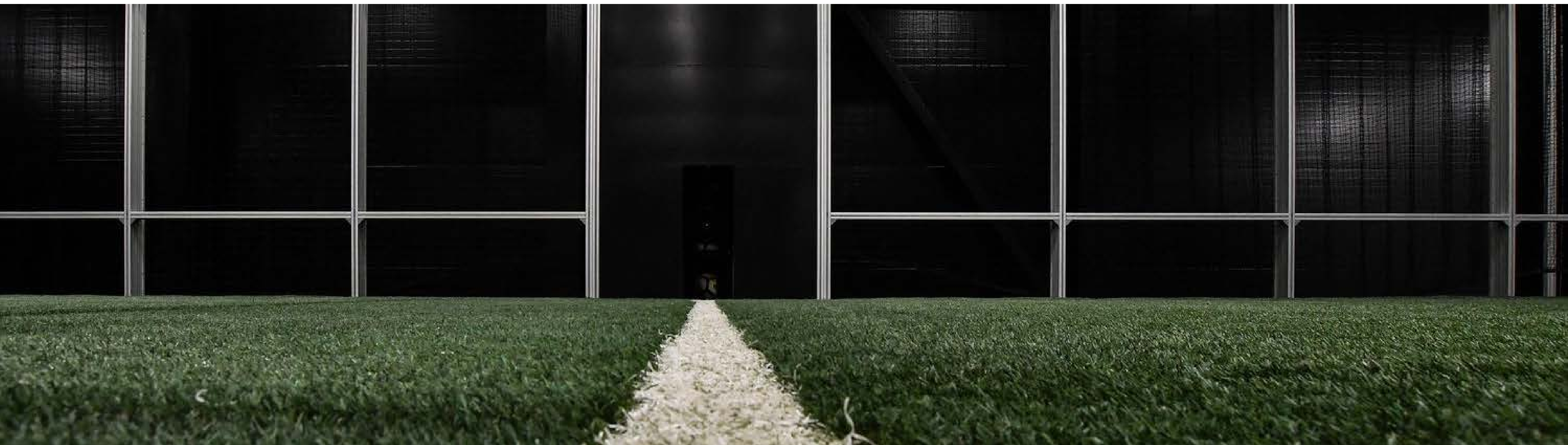
The ball control skill is critical for a success in football and makes it different from many other sport discipline  
The individual tactical and technical performance in every match may be classified as follows





Training simulator: Makes it possible to train the ball receiving, passing and handling skills on a time-efficient basis, with the player trained to effectively handle the ball as the situation requires; to ensure individual progress in a variety of aspects including ball handling speed, accuracy, response efficiency, positioning skills and game situation analysis; with the special benefits for attention focusing, switchover and control abilities.

Trainings with the simulator proved its efficiency both for the game perception, motor skills and qualities which are always critical for competitive success.





# DATA DRIVEN INSIGHTS

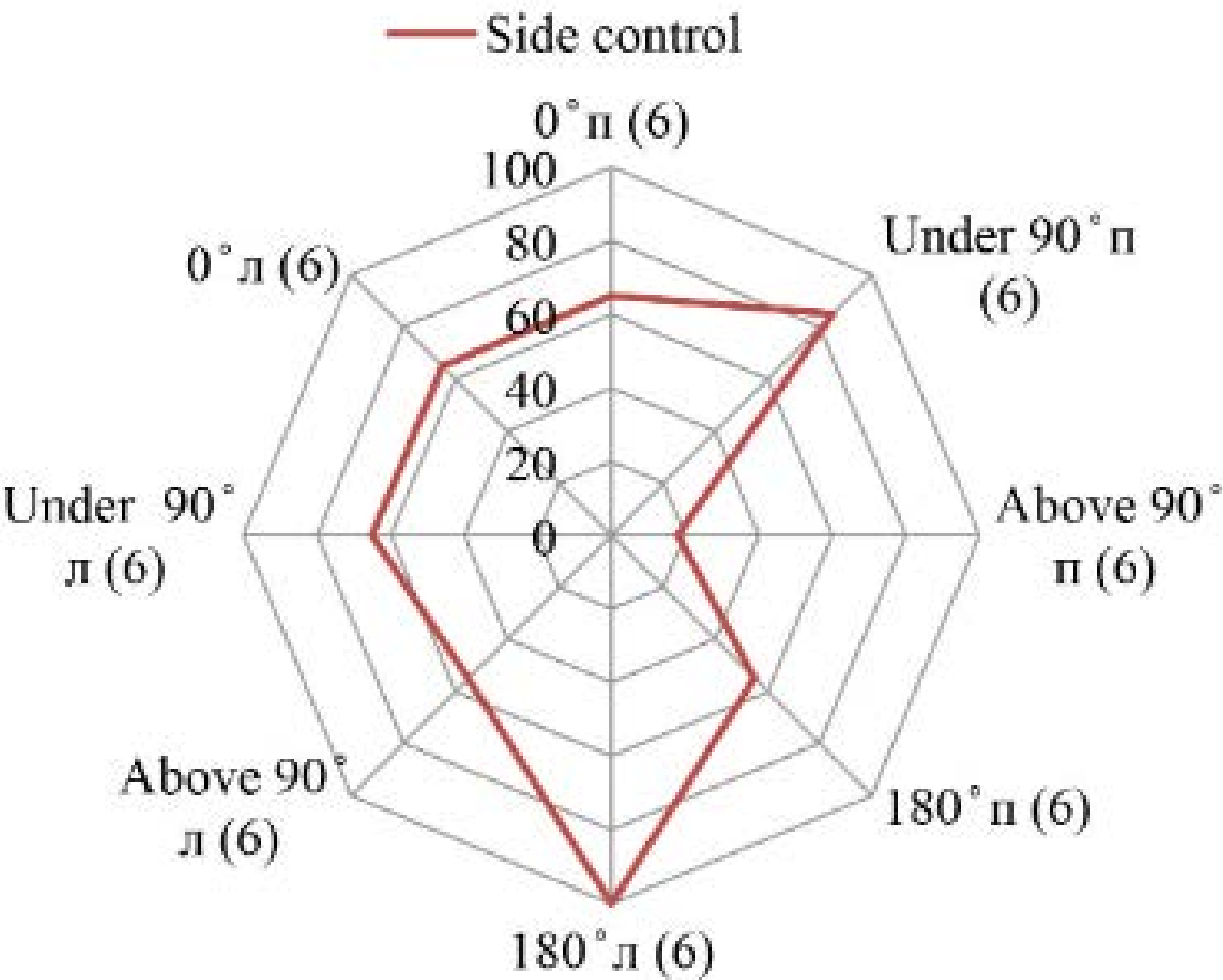




# PLAYER 19: TEST DATA ANALYSIS

Based on the Player 19’s test results, the individual technical performance may be rated as follows: of the eight technical skills, only U-turn to the left was performed properly; the 90o+ turns, particularly to the left were the most difficult for the player. The player’s position is the right winger. That means that he uses 90o+ turns not quite often. However, he still needs this skill and, if untrained, will act poor or even can lose the ball control. The performance rating test data provided by the FootBot training simulator system can hence be effectively applied to adjust deficiencies in the individual technical skills and competitive performance.

Note: 1, 2, 3 – training session number; r, l – right and left side, respectively; (6) number of balls shot





Conclusion: Currently a growing researches' priority is being given to the technical performance of the leading Russian footballers as verified by the above mentioned study reports and analytical findings.

'Footbot' training simulator proved its effectiveness for footballers' progress in the ball control, receiving and passing skills, shooting speed and accuracy, with the system providing an efficient test toolkit for the real-time fitness and progress rating tests.

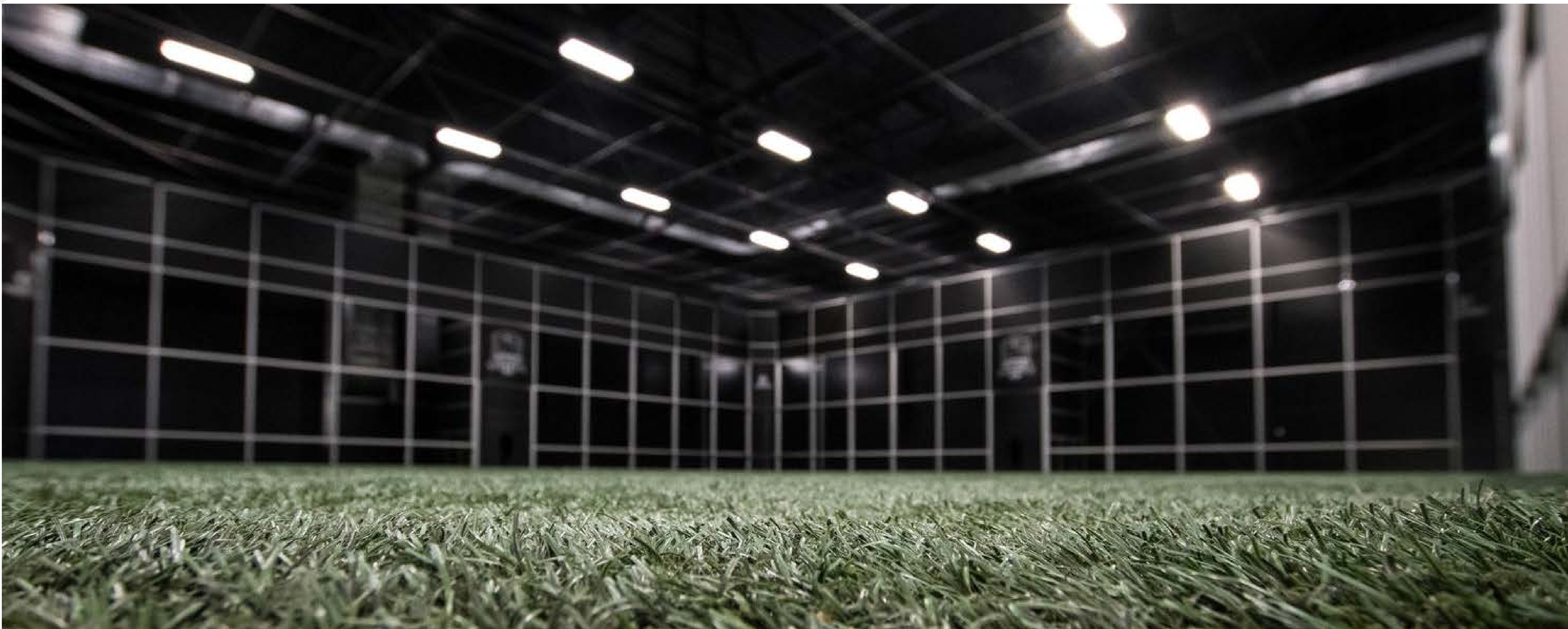
### Benefits

- Enhancing player technical skills
- Improving response speeds
- Developing spatial orientation skills
- Learning situation assessment
- Developing complex responses
- Improving focus intensity, switching and scope
- Ability to conduct training sessions with various targets
- Supervising players' physical conditioning
- Use in rehabilitation
- Assistance in player selection in various age categories





# TRAINING SESSION





# EVENTS & NEW

Footbot was in news when President Vladimir Putin has paid visit to russian Football club and had discussion with FIFA chief.





