

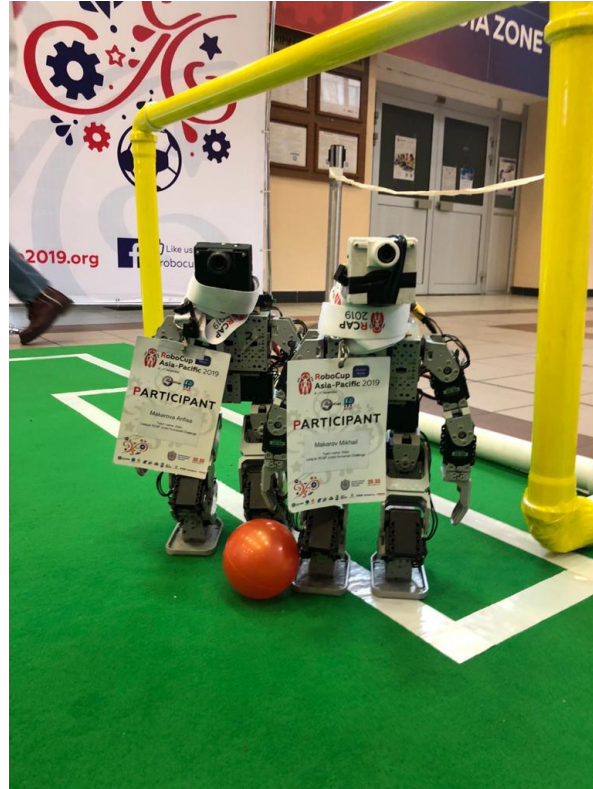
Robocup Junior Humanoid Soccer Challenge

Introduced by Russian National Robocup Committee
(based on the 2007 version of the rules Humanoid Soccer)

Admissible robot types



Kondo robot upgraded with smart camera

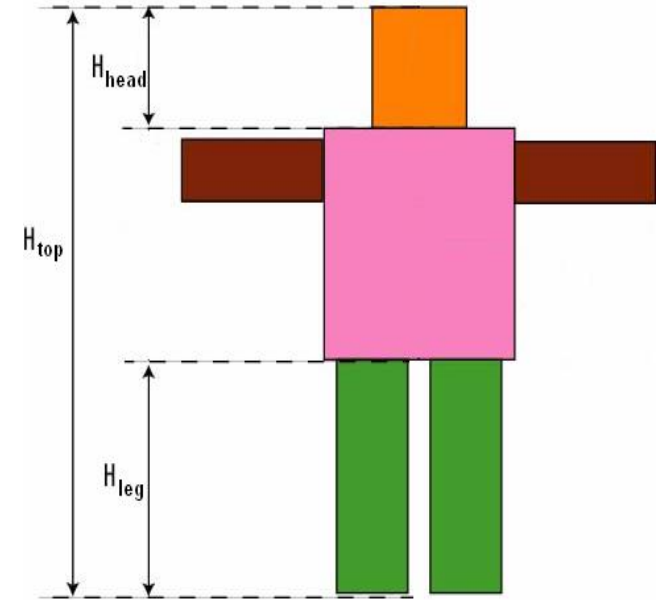


Bioloid robot upgraded with smart camera

Any other type
robot meeting
size and weight
requirements

Admissible robots data

- Weight - below 2 kg
- Maximum Height 50cm
- Proportions of Arms span, center of mass, foot size - according to RC HL kid size rules.



Ball

SIZE – diameter 80mm

Weight – 28 g

Color - orange

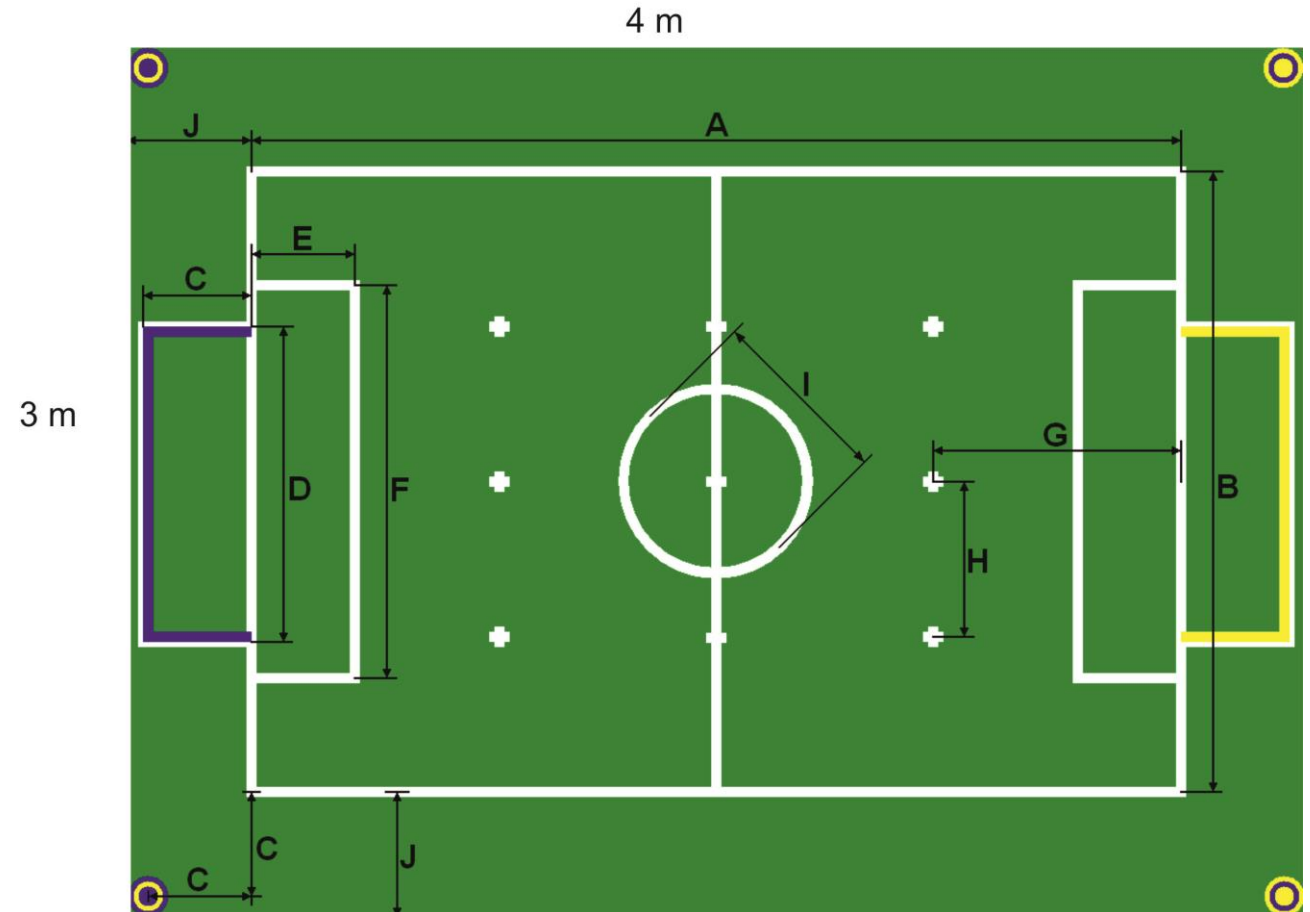


The Field of Play

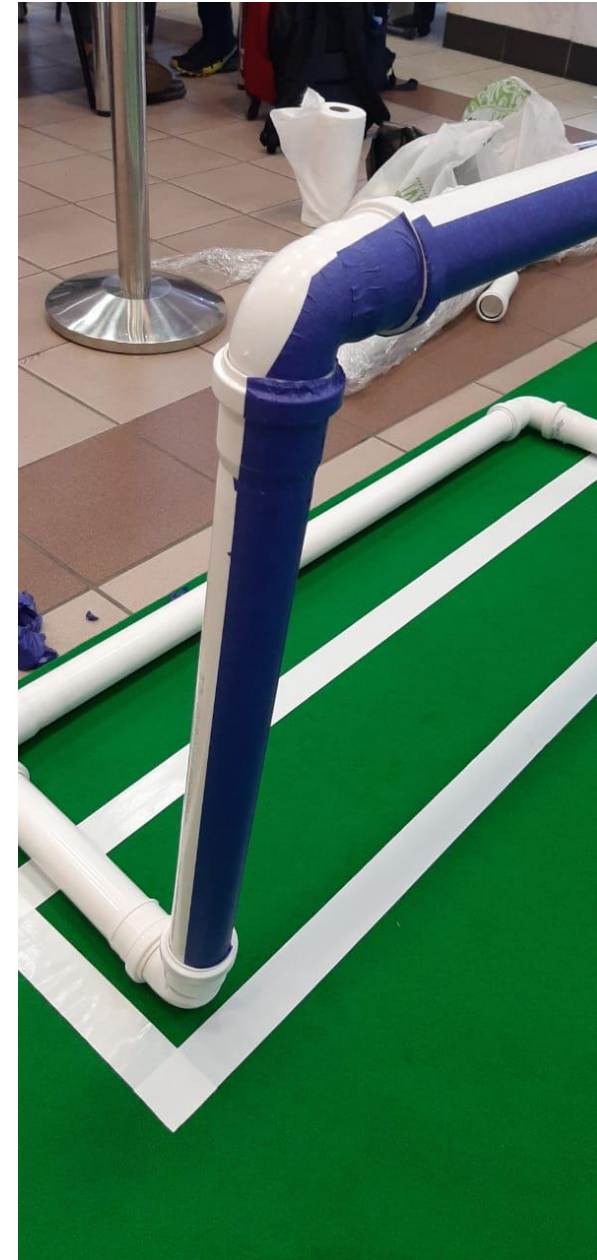
Floor: Green carpet with 3 mm pile height.

Goals: White color sanitary 50 mm pipe with yellow and blue masking

Field marking: 50mm white color adhesive tape



The Field of Play



History of tournaments

- Robofinist St.Petersbourg 2018. Demo game.(2 teams)
- Robocup Moscow regional competition. 2019. Demo game.(2 teams)
- Robocup Russia Open April 2019 . Tomsk. (3 teams)
- Robocup Asia Pacific November 2019. Moscow. (5 teams)
- Robocup Robofest Challenge. March 2020 (postponed to September 2020). 6 teams were registered for participation.

History of tournaments

- Robofinist St.Petersbourg 2018. Demo game.



History of tournaments

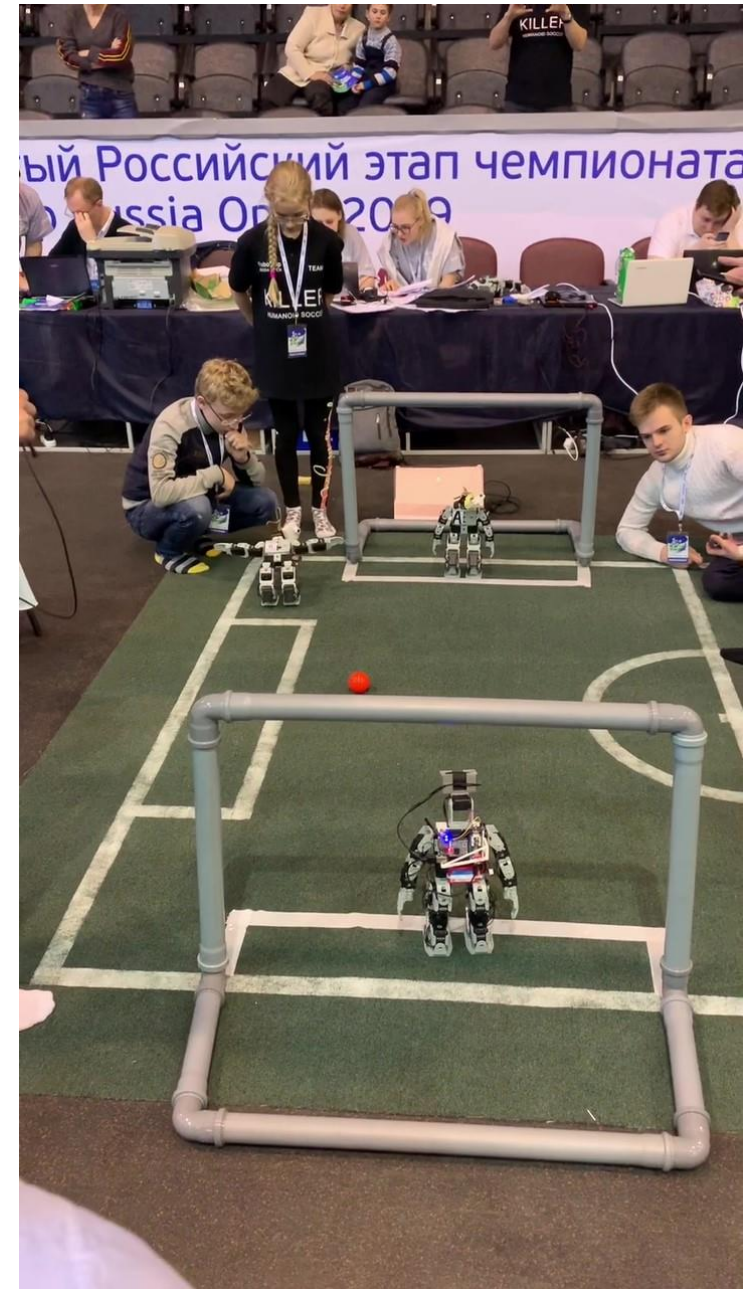
- Robocup Moscow regional competition. 2019. Demo game.(2 teams)



History of tournaments

- Robocup Russia Open April 2019 . Tomsk. (3 teams)

Video: <https://youtu.be/OkY0hhDKXvk>



History of tournaments

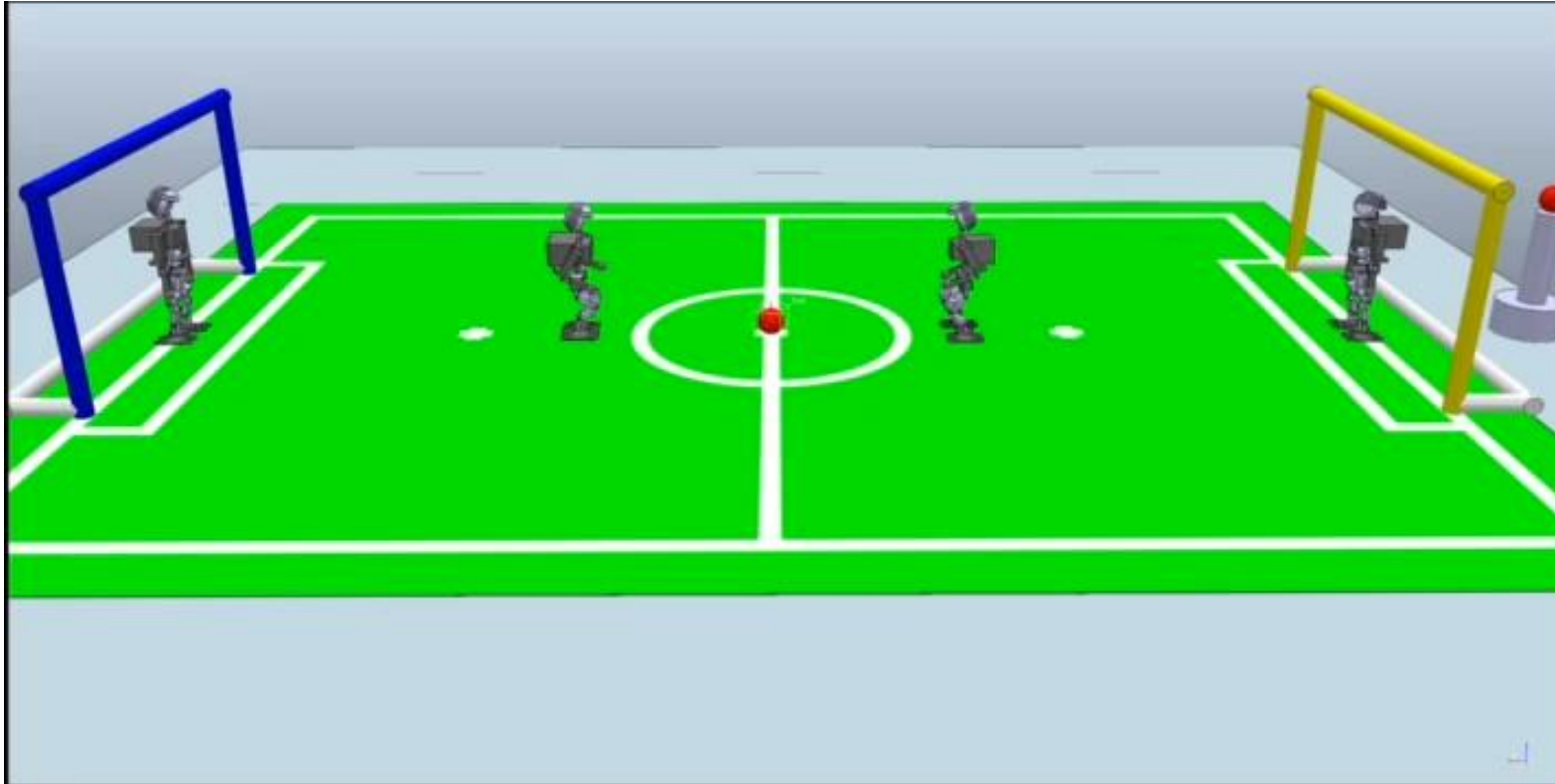
- Robocup Asia Pacific November 2019. Moscow. (5 teams)



Video: <https://youtu.be/ARHARfGjdKo>

Contactless competition

CoppeliaSim ^{edu}



Video: <https://youtu.be/pu6SD5pA9P4>

Robot size comparison


The maximum size of the robots is 1 meter, the maximum weight is 10 kg

The maximum size of the robots is 0.5 meter, the maximum weight is 2 kg



ROBOT	Weight	Size
Bioloid	1.5 kg	40 cm
Kondo	1.7 kg	45 cm
Bioloid GP	1.6 kg	35 cm
Darwin	3 kg	46 cm
NAO	5.5 kg	57 cm

Ball comparison

	FIFA size 1	Sponge ball	Plastic ball
Diameter	150 mm	80 mm	70 mm
Weight	205 g	28 g	60 g
Rolling distance after kick by Bioloid	0.10 m (estimation)	0.8 m	0.4 m
Rolling distance after kick by Kondo	0.24 m (estimation)	1.6 m 	0.8 m

Turf pile height

	Maximum foot elevation in customized gait	Maximum adaptable pile height
Bioloid	15	8 (evaluation)
Kondo	30 mm	15 (evaluation)

maximum leaf length of 30 mm	Maximum pile height 3 – 8 mm	
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Drop-in teams vs solid teams ?

Drop-in games

Solid team games



Related material location

www.robocup.ru