

ROBOT COMPETITION

ISMART

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WELCOME

I-SMART
SCIENCE | MATHS | ARTS | ROBOTICS | TECHNOLOGY

ABOUT US

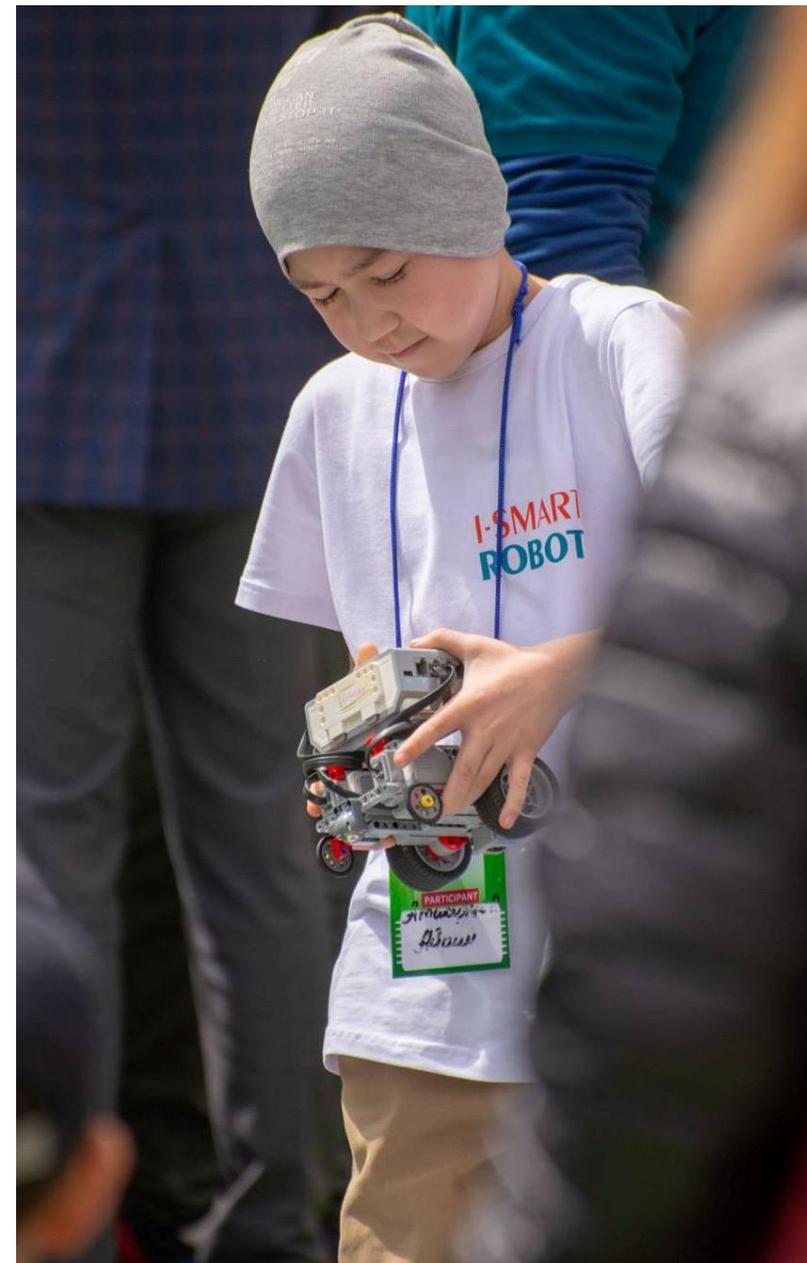
ISMART Robot Olympiads

The formation of the ISMART Robot Olympiads began with the support of the Sapat International Educational Institution and Turkiye Maarif Foundation in educational area in Kyrgyzstan. TMV aims to bring world standards and new practices in education not only to its own institutions but also for the Kyrgyzstan education system. For this purpose, the ISMART Robot Olympiads are open to all Kyrgyzstan youth and international students who wants to involve the organisation.



MISSION

Robot and artificial intelligence technology will take a very important place in the world of the future. ISMART Robot Olympiads have been organized in Kyrgyzstan since 2014 in order to attract the attention and interest of young Kyrgyz people and students to this field and also to position them among the most important staff in the future. Now our mission is to widen this olympiad to Asian and Pasific countries students as well.



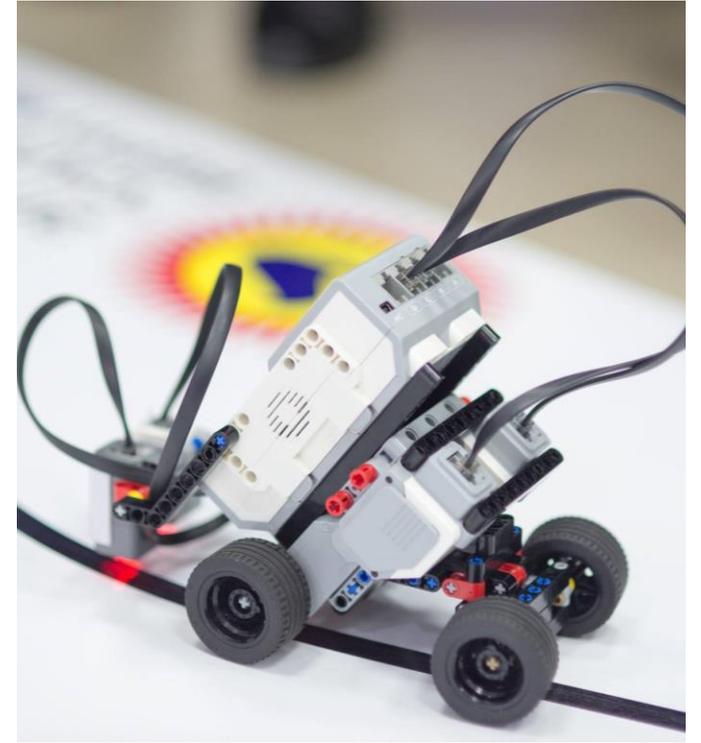
IS^{SMART} Categories



Drone



Lego Sumo



Lego Line Follower

ISMART Categories



Kok Boru

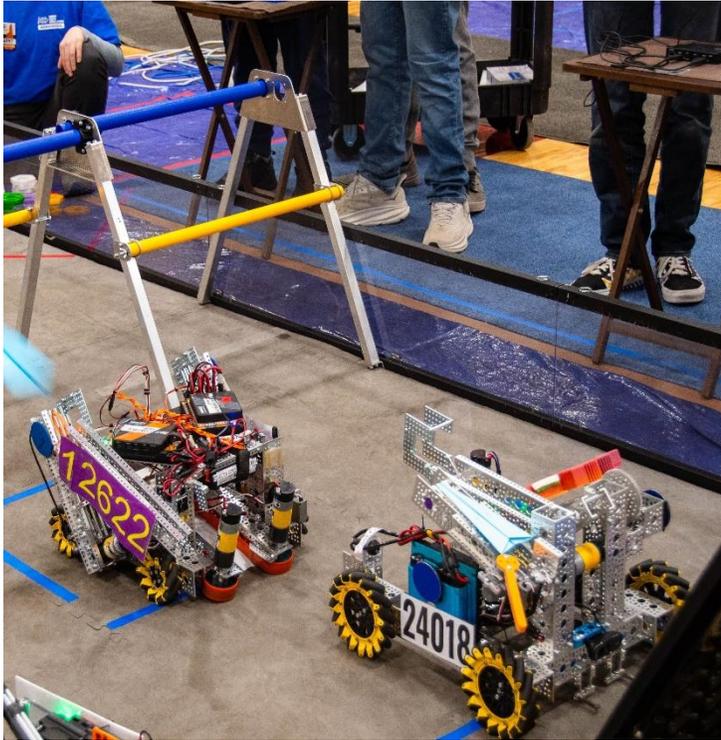


Kegel Ring



Future Creators

ISMART Categories



First Tech Challenge



Future Creators

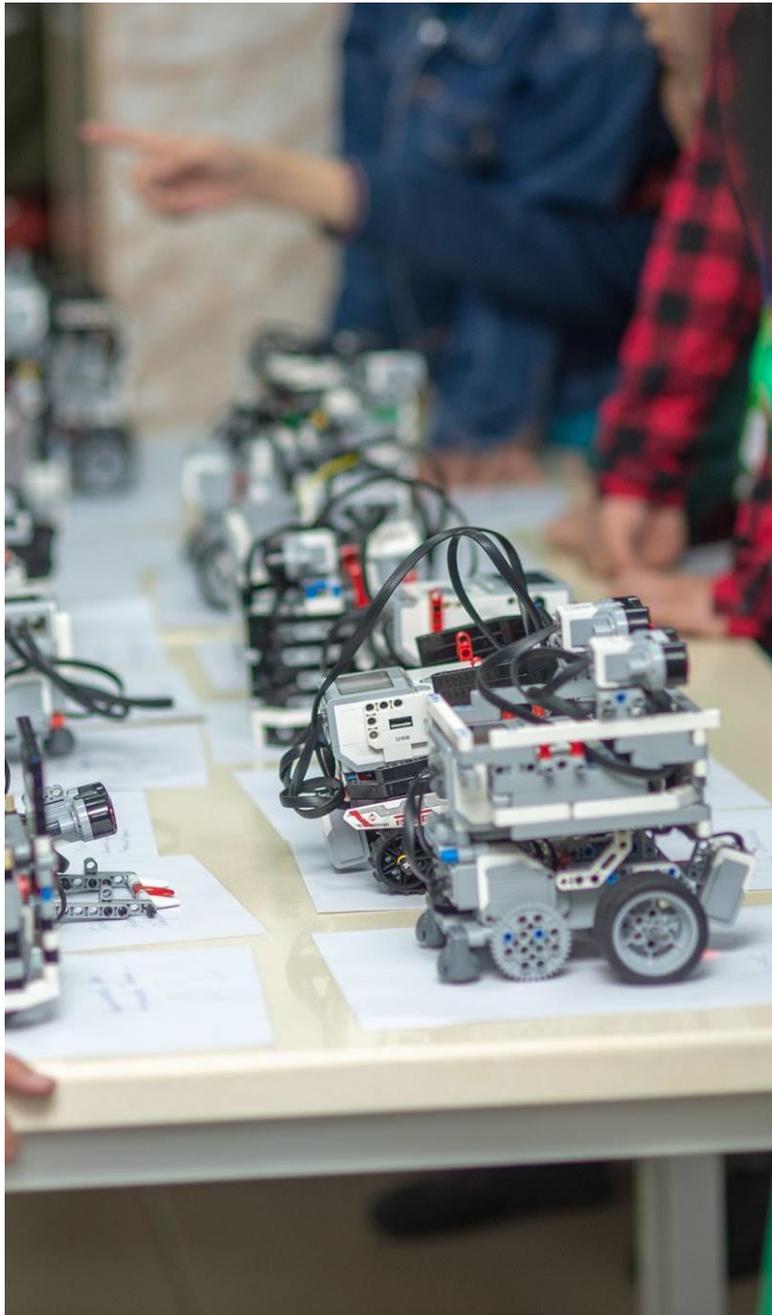


Rube Goldberg Machine



DRONE

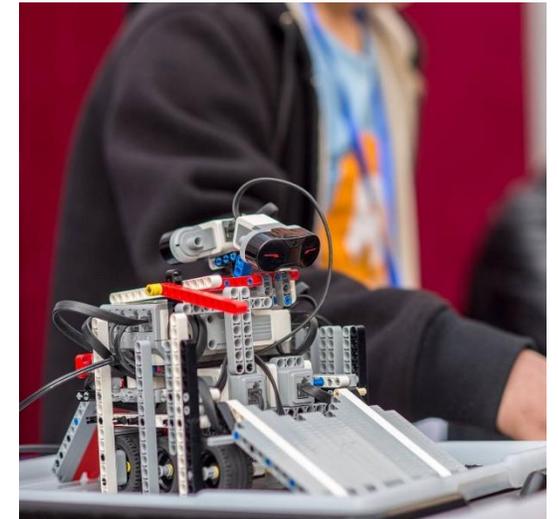
Drones are used in many areas today. Although aerial imaging and mapping are the most common applications, there are also various applications in areas such as cargo transportation, fire extinguishing, first aid and life saving. During the competition, the main tasks are piloting of the drone. Pilots must fly their drones through courses at high speed and work to “cross” the finish line first.



LEGO sumo is a competition where two robots attempt to push each other out of an arena using mechanisms, cunning, and brute force.

LEGO SUMO

Two self controlled robots compete and try to push their competitor off the field. The field is round and the interior surface is painted black and is bordered with a white margin.

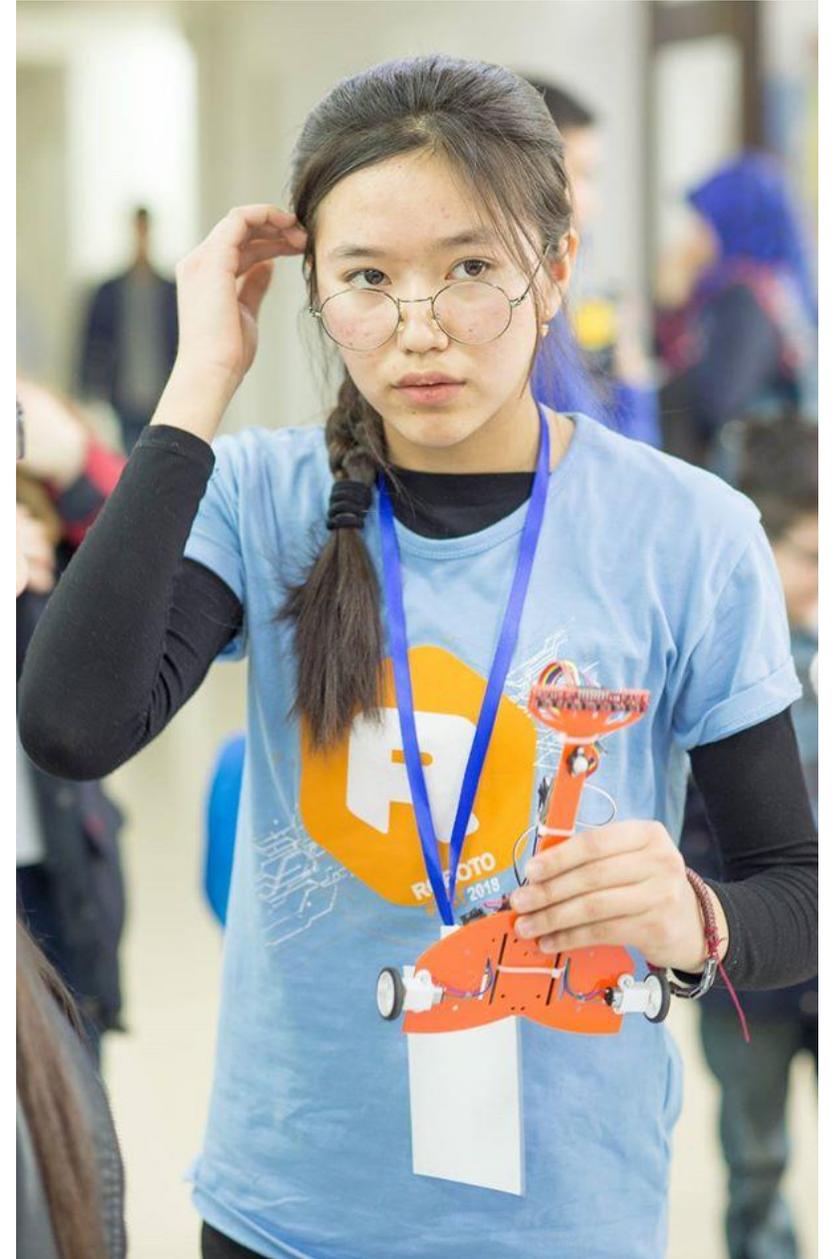


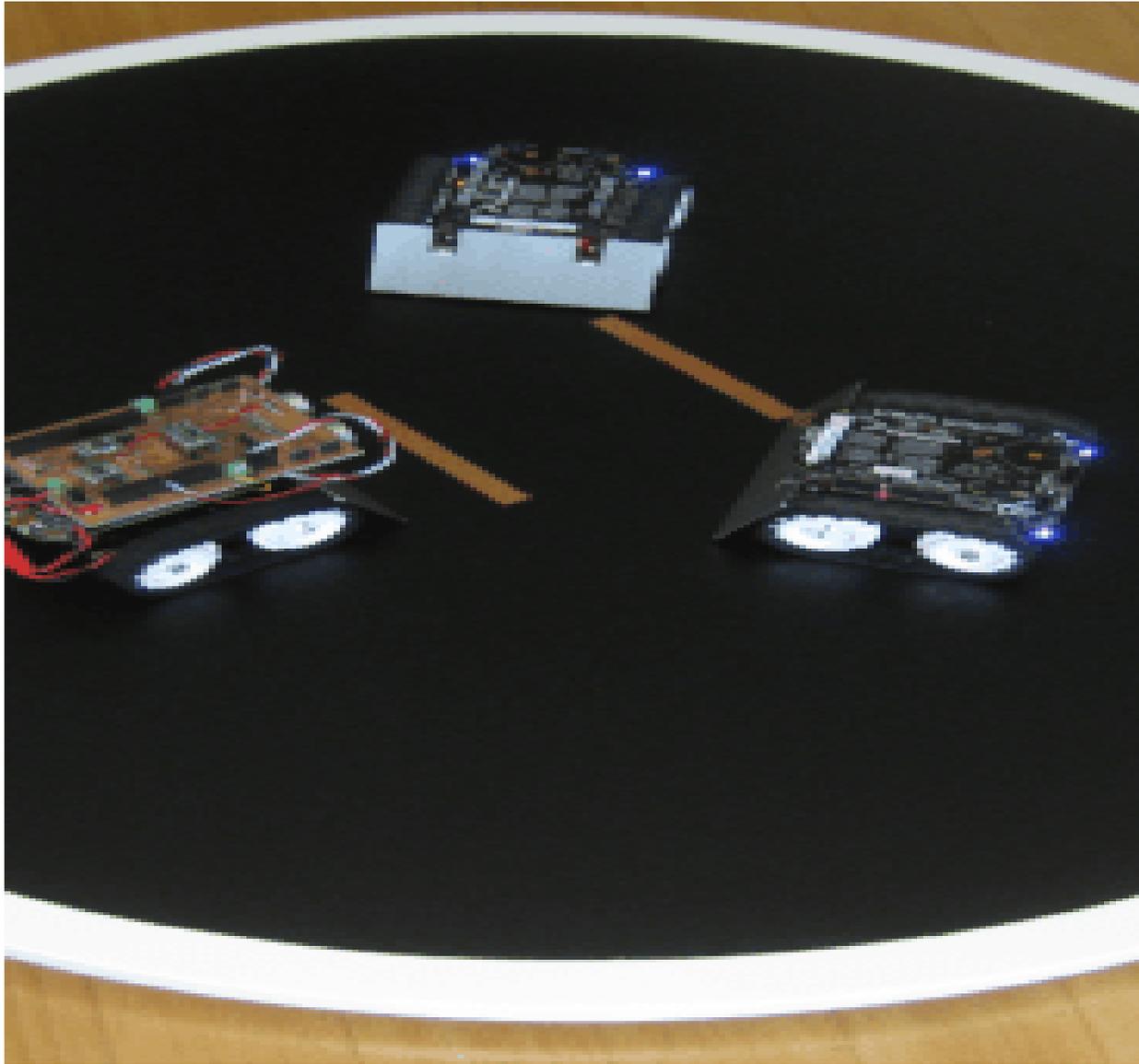
LEGO LINE FOLLOWER

The purpose of the line follower robot is to follow a line. The robot will only follow a line that is black against a white background or a white line against a black background.

This is so that the sensors can distinguish a clear difference in light and so the robot can trace and follow the line. From my research

I have decided to use infrared LED emitters (phototransistors).





IS MART ROBOT OLYMPIAD

Arduino sumo is a competition where two robots attempt to push each other out of an arena using mechanisms, cunning, and brute force.



Arduino Sumo

Two autonomous robots compete and try to push their competitor off the field. The field is round and the interior surface is painted black and is bordered with a white margin.

ARDUINO LINE FOLLOWER

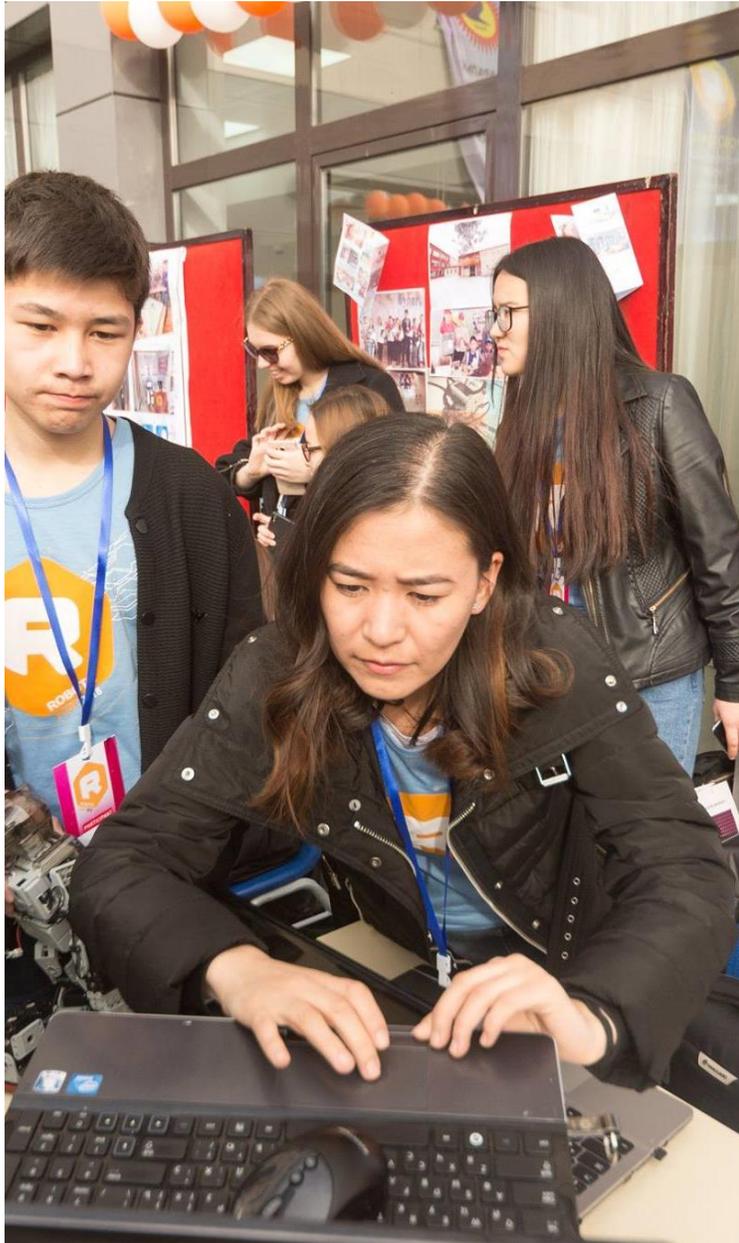
The purpose of the line follower robot is to follow a line. A robot will only follow a line that is black against a white background or a white line against a black background. This is so that the sensors can distinguish a clear difference between light and dark and so the robot can trace and follow the line.





ARDUINO FAST LINE FOLLOWER

The purpose of the fast line follower robot is to follow a line. The robot will only follow a line that is black against a white background and it should finish the line before its opponent. This is so that the sensors can distinguish a clear difference in light and so the robot can trace and follow the line.



Future Creators

"Innovative technologies developed in the fields of agriculture, industry, health, and transportation that help us solve environmental and social problems." Participants should design, build, and present their projects in line with the main theme. There are no restrictions on materials or size; this allows participants to fully express their creativity and innovation.



KOK BORU

Kok Boru is a kind of Lego competition. Its name comes from the national Kyrgyzstan Kok Boru games. Robots carry the little goat figures to the finish lane. Every carried goat brings points to the robot. At the end one of the participant wins the game.

KEGELRING

Kegel ring is a rounded ring that robot is trying to throw away the matters from the ring one by one. The participant wins the competition with lowest time that finished all the matters has thrown away.





First Tech Challenge

FIRST® Tech Challenge students work together with their mentors to design and build robots to compete in a dynamic and exciting challenge released every September.

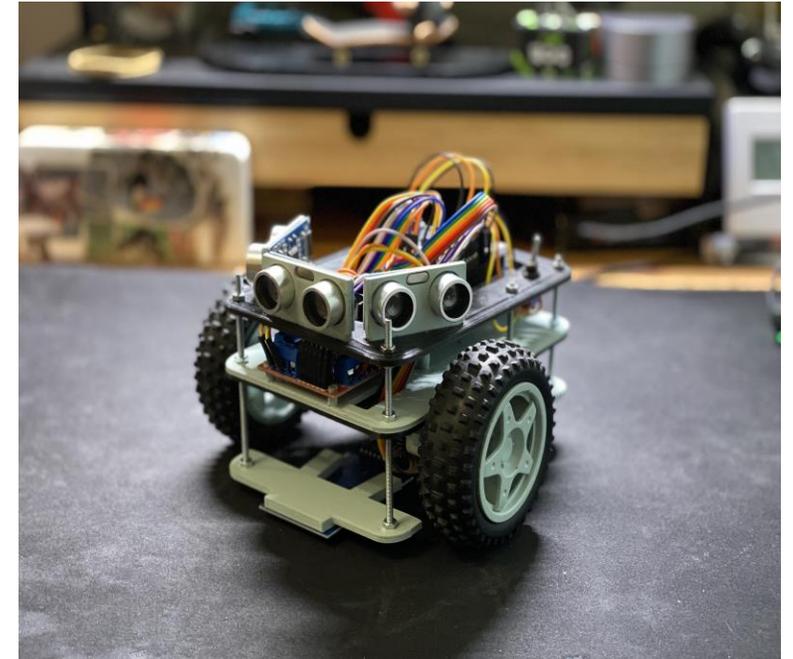
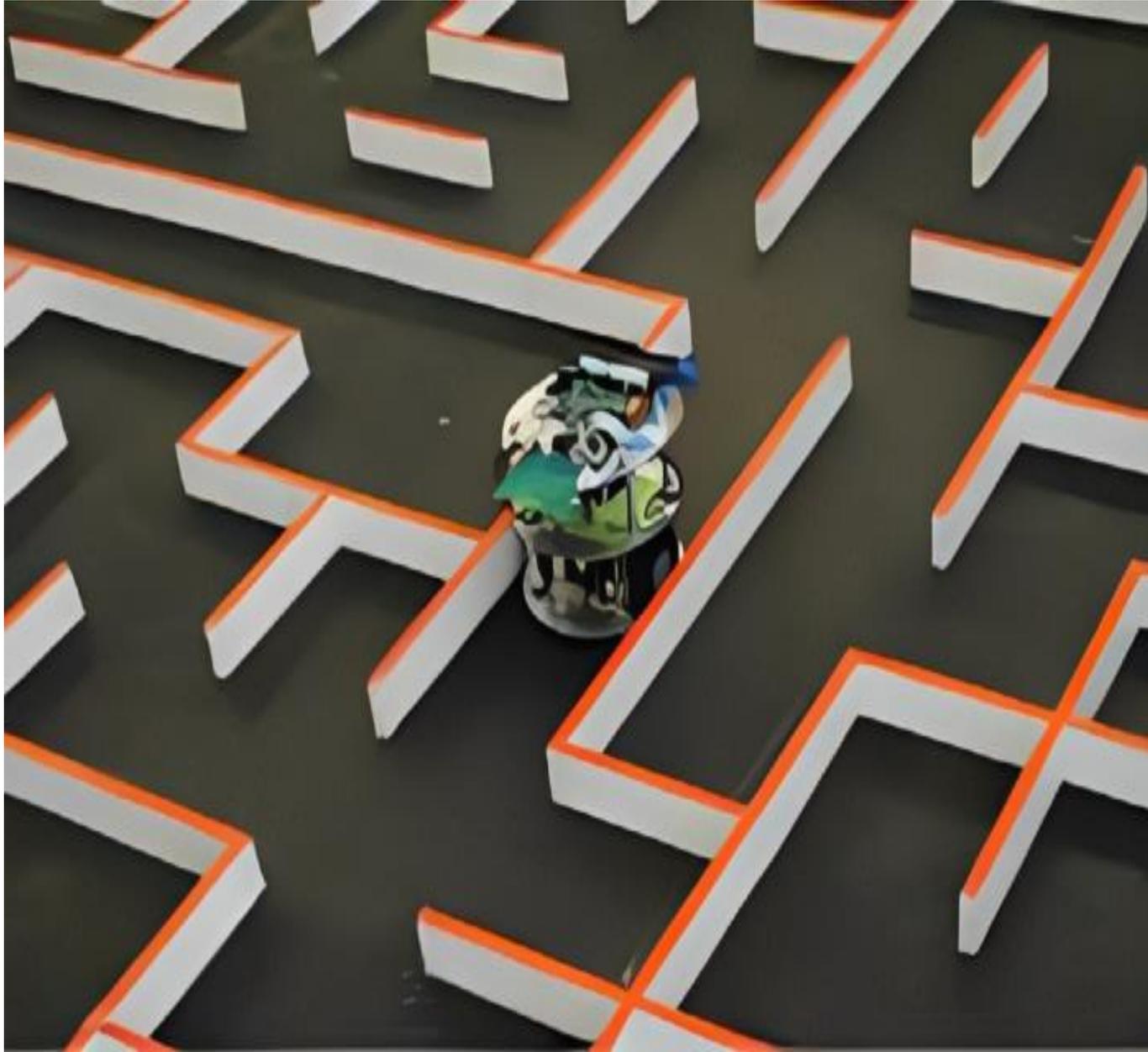
Teams program classroom-scale robots to follow autonomous commands before student drivers take control in two-on-two matches.

On and off the field, students develop STEM skills, engage in community outreach, practice engineering innovation, and build confidence to help them succeed.

Rube Goldberg Machine

A Rube Goldberg machine is a contraption that uses a chain reaction to carry out a simple task. It performs a very basic job in a complicated way.





MAZE SOLVER ROBOT

The purpose of the maze solving robot is to find the exit. The robot will realise the walls and then find its own path to be the fastest robot on the finish line.

Do It Yourself

This category is based on to determine the abilities of the students on competition time. The participants will design the robot regarding the instructions given in the championship day. Then they will develop the software of the robot. After all, robots will show up on the field and most marking robot will win the championship.





IS M A R T ROBOT OLYMPIAD

SCHEDULE

23 TH OF MAY 2026/

United World International School

At 8:00

Address: A. Masaliev str. Bishkek

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