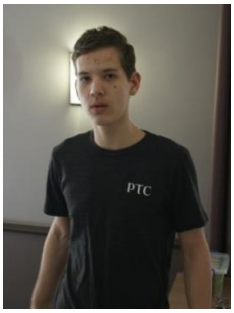
Team PML30-phi

Physics and Mathematics Lyceum №30, Saint-Petersburg, Russia



Georgiy Krylov
Captain, responsible for efficiency of working in the team

Evgeniy Maksimyshev
Operator №1, engineer, responsible for programming

Nikita Safronov
Operator №2, engineer, responsible for technical documentation

Ivan Fokin
Engineer, responsible for purchasing materials

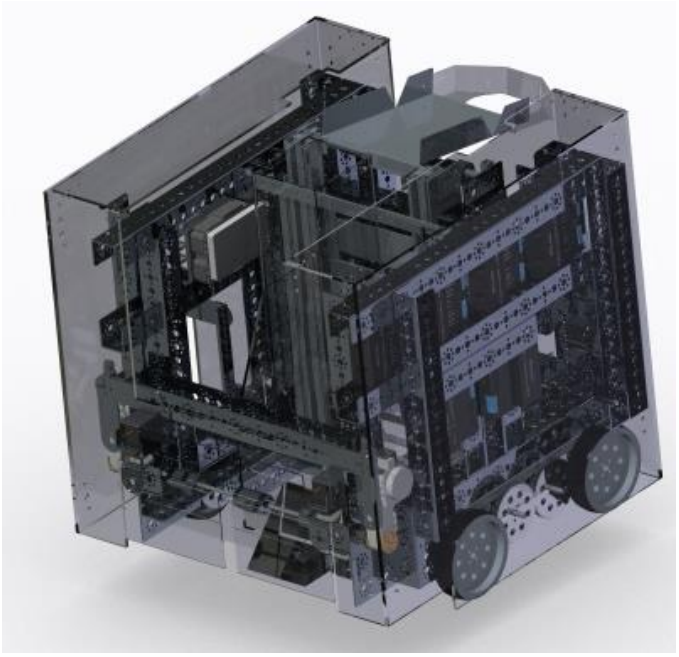
Maksim Radionov
Engineer, responsible for public relations

Strategy (number of scoring points is noted in brackets):

1. Autonomus period (2 options):
   1.1. Riding out of the ramp, scoring autonomus balls into 60 and 90 cm rolling goals and delivering them to the parking zone. (**120**)
   1.2. Start from the parking zone, scoring autonomus balls into 30 and 90 cm rolling goals and delivering them to the parking zone. (**100**)
2. Driver-control period: carrying 90 cm rolling goal and filling it with balls (**200 - 270**). During end game scoring 4 big balls into central goal (**180**) or delivering rolling goals to the ramp (**120**).

Construction features (numbers of following pages in technical documentation is noted in brackets):

1. Strength:
   1.1. Most of construction elements are made of metal (aluminum, steel).
   1.2. Elevator works stable because it is made of retractable slats. (pages 17, 20)
   1.3. Robot is heavy, so it's hard to turn it over.
   1.4. Robot is protected from collisions with Plexiglas.
2. Mobility:
   2.1. Robot has 4-wheel drive. Four motors provide maximum power and speed of moving. (pages 17)
   2.2. With standard TETRIX wheels robot never slips and easily rides up to the ramp. (pages 17 ,70)
3. Balls control:
   3.1. Gripper for balls consists of 2 fast rotating vanes. (pages 21, 70, 74 & 117)
   3.2. The bucket for balls rises up with elevator and overturns backwards. (pages 27, 77)
   3.3. Balls from the bucket move to the guide with hole at the end of it. Balls fall down from the hole vertically, so they always get into the goal. (pages 77, 103-104)
   3.4. Robot captures the rolling goal with special mechanism and carries it with itself. (pages 18, 49, 57)



We thank our sponsors:

PTC®

IR ИРИСОФТ
решения, ведущие к успеху

ФИНИСТ

Contact information:

Website:
http://school30.spb.ru/robot/
e-mail:
robodepartmentPML30@yandex.ru