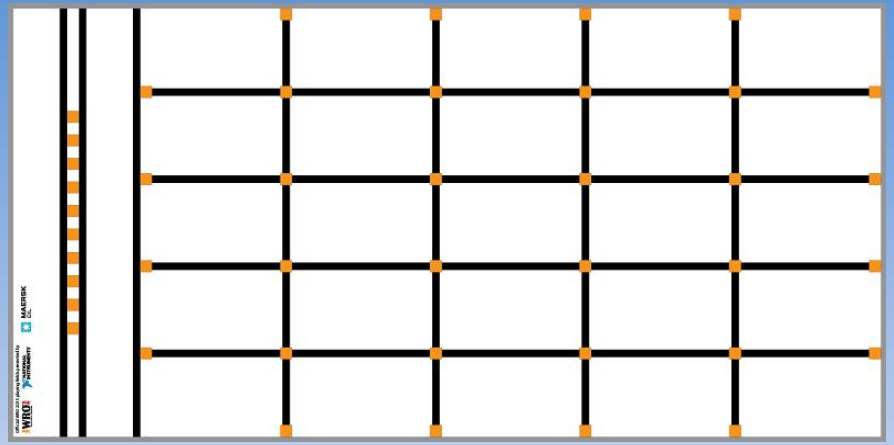
Robotika,
a 21. század vezető tudománya

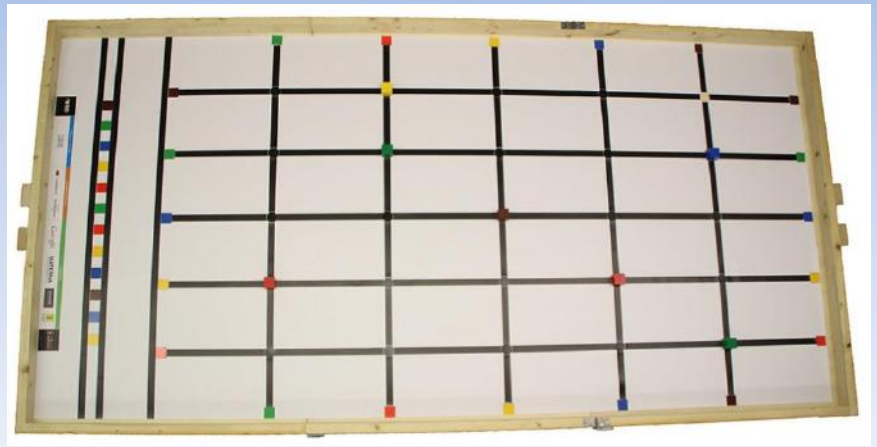
Nyíri Anna Eszter

WRO™
WORLD ROBOT OLYMPIAD

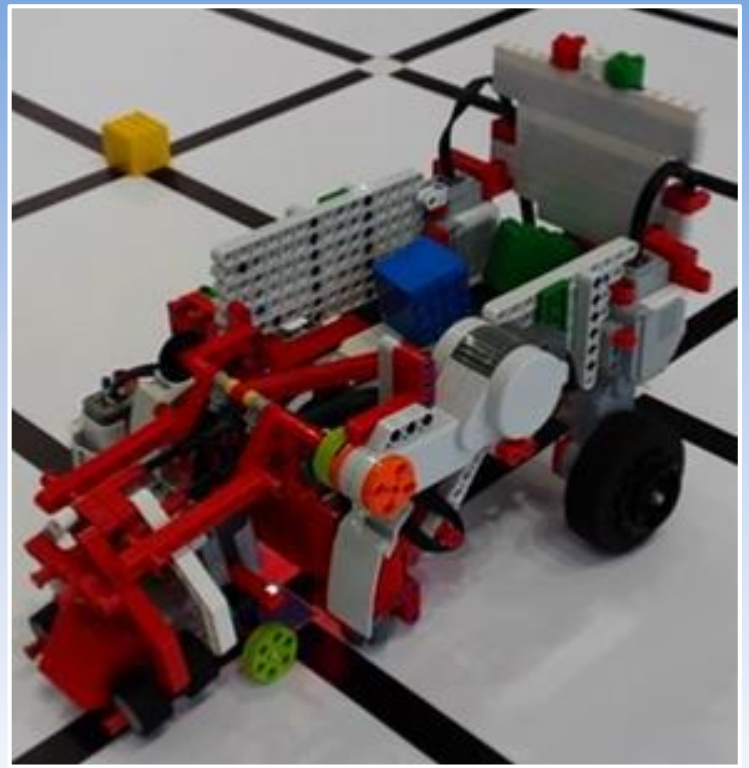
FIRST LEGO LEAGUE

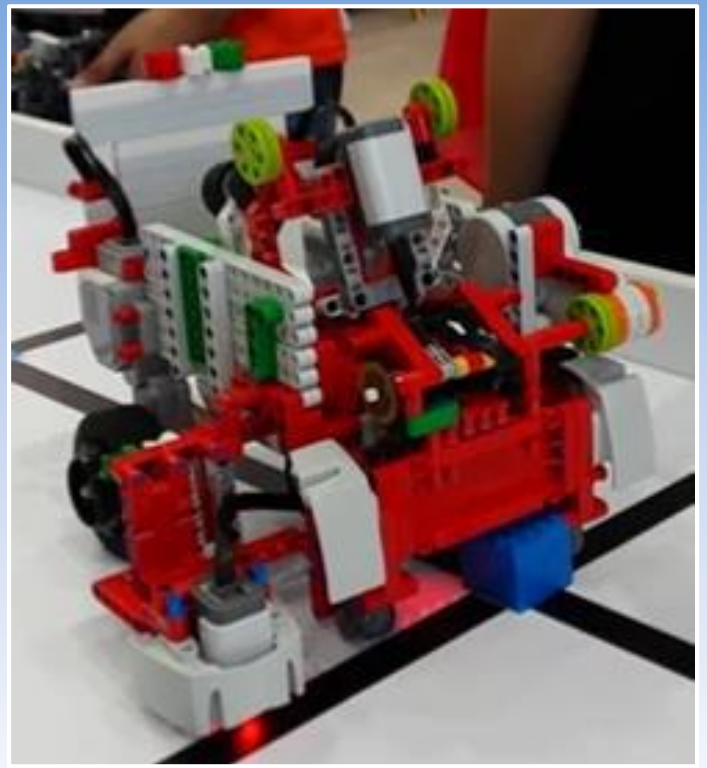
WRO - Doha, Katar, 2015



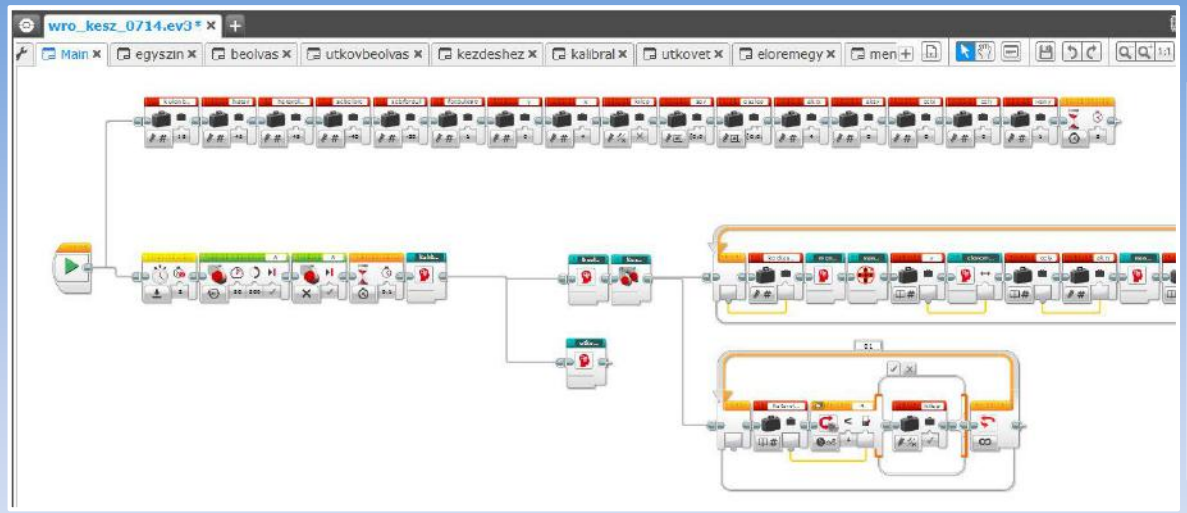


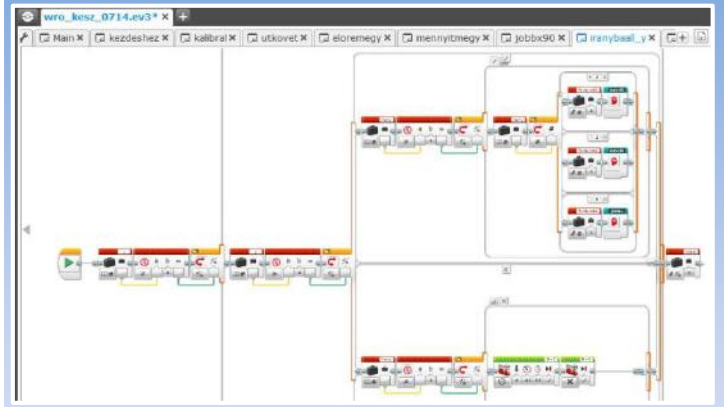
WRO - Doha, Katar, 2015

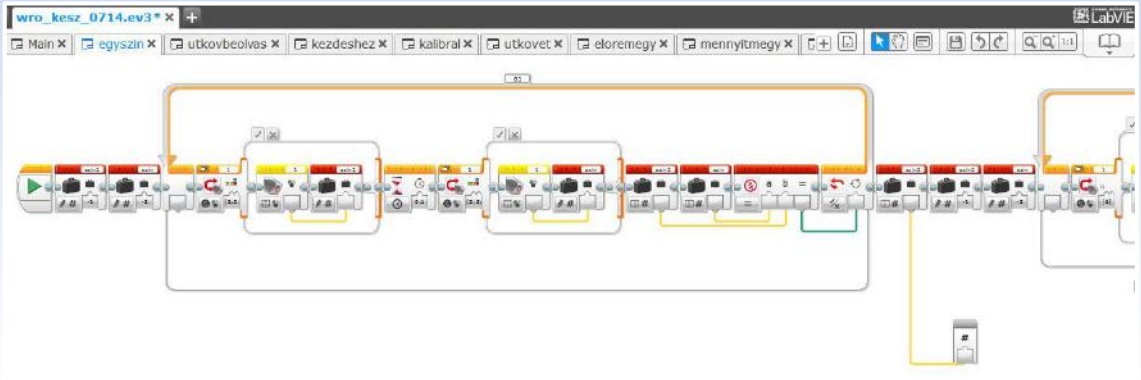




WRO - Doha, Katar, 2015







WRO - San José, Costa Rica, 2017

COSTA RICA 17

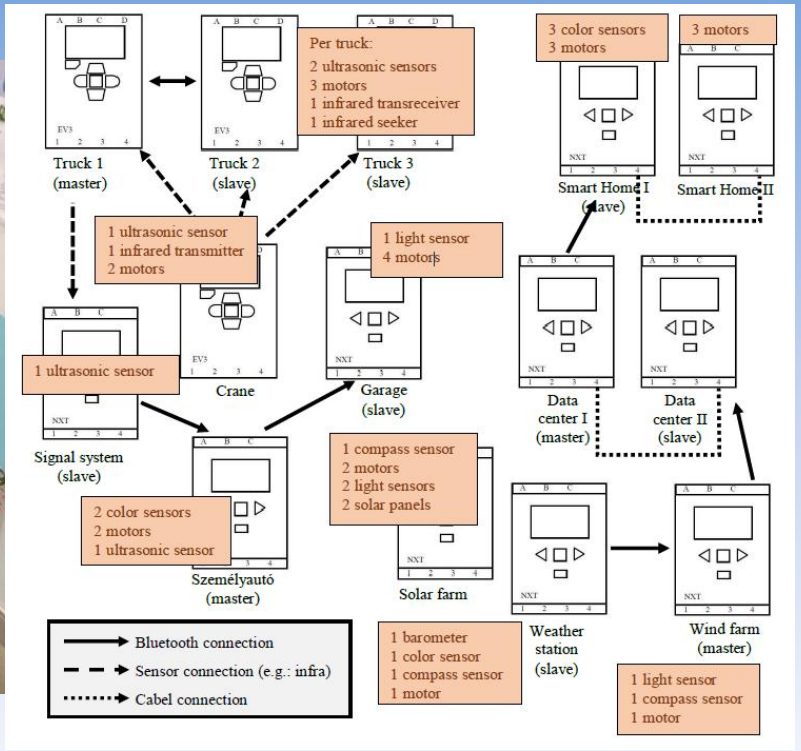
SKYNET CITY

Global City Controlling System

SKYNET

GLOBAL CITY CONTROLLING SYSTEM

WRO - San José, Costa Rica, 2017



WRO - San José, Costa Rica, 2017

auto.nxc

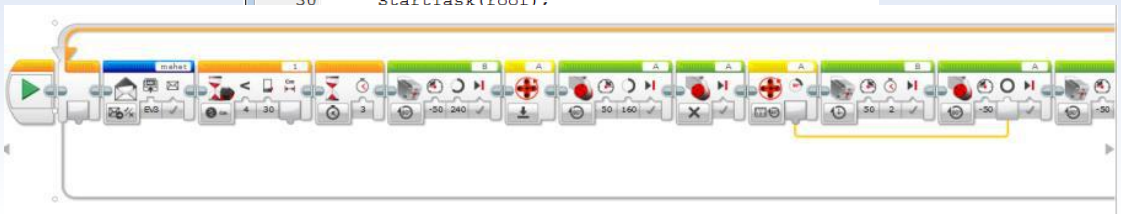
```
bool RoadFree=true;
int hatar=35;
int seb=15;
int diff=15;

task comm(){
     while(true){
          ReceiveRemoteBool(1,false,RoadFree);
     }
}

void utkov(int x, int y){
     ClearScreen();
     NumOut(5,5,Sensor(IN_2));
     NumOut(5,20,Sensor(IN_3));
     if(Sensor(IN_2)>hatar){
          if(Sensor(IN_3)>hatar){
               OnFwd(OUT_BC,x+y);
          }
          else{
               OnFwd(OUT_C,x+y);
               OnFwd(OUT_B,x);
          }
     }
     else{
          if(Sensor(IN_3)>hatar){
               OnFwd(OUT_C,x);
               OnFwd(OUT_B,x+y);
          }
          else{
               OnFwd(OUT_BC, x+y);
          }
     }
}
```

garazs.nxc

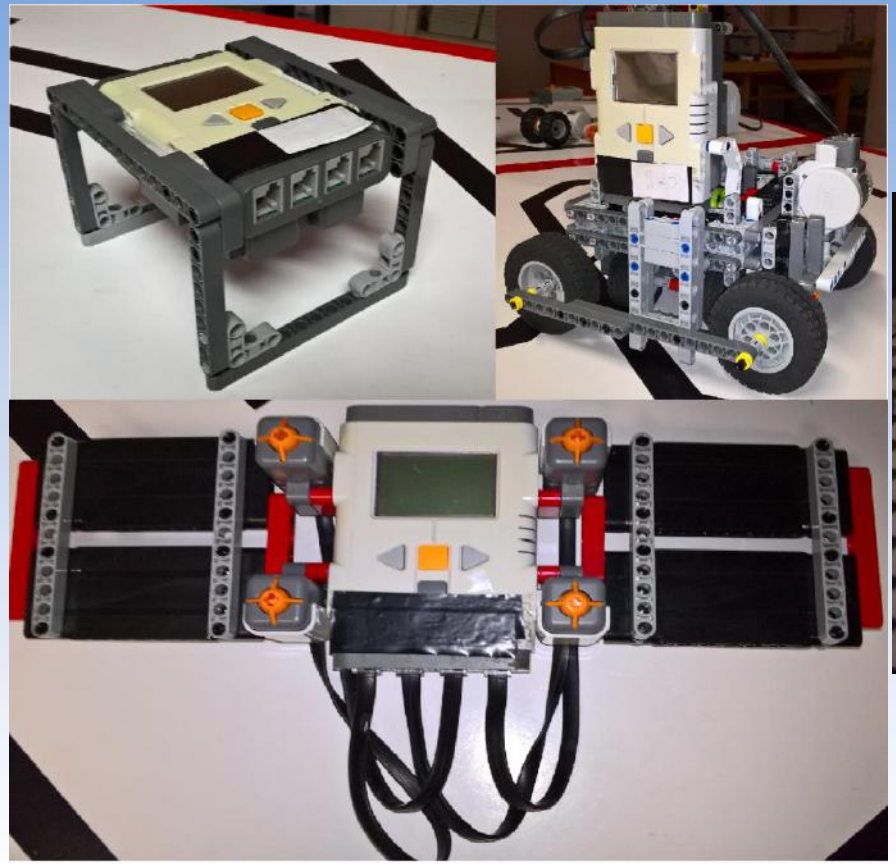
```
task roof()
{
     int nap, fent=0; //0-->lent van
     while(true)
     {
      ReceiveRemoteNumber(1, false, nap);
      if (!fent && nap)
      {
         RotateMotor(OUT_A, (nap-0.5)*100, -173);
         fent=1;
      }
      if (fent && !nap)
      {
         RotateMotor(OUT_A, (nap-0.5)*100, -173);
         fent=0;
      }
      //NumOut(0,0,nap, true);
      //NumOut(10,0,fent,true);
      if(SensorUS(IN_1) != 255){
       NumOut(10,10,SensorUS(IN_1),true);
      }
     }
}

task main(){
     SetSensorLowspeed(IN_2);
     SetSensorLowspeed(IN_1);
     SetSensorTouch(IN_4);

     StartTask(roof);
```

napelem.nxc

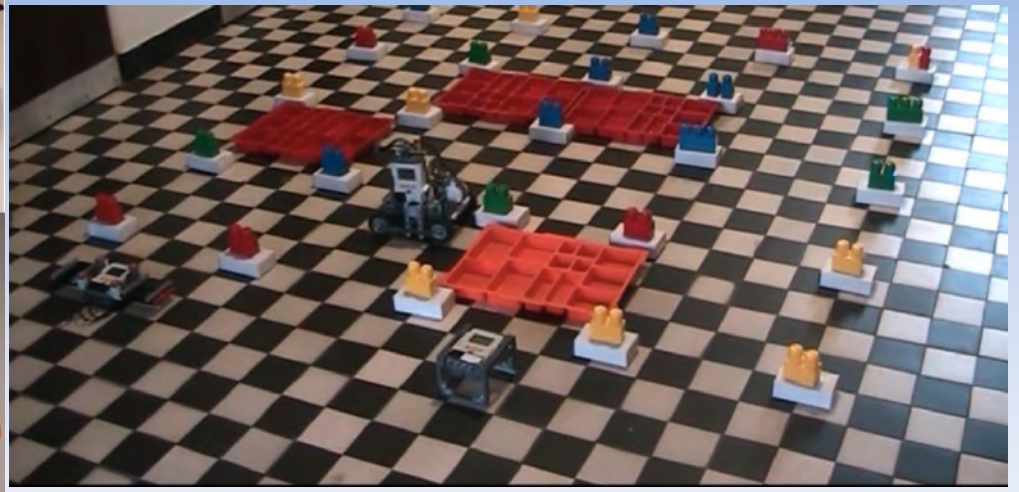
```
     int motorRotationBase = 0;

     StartTask(solarPower);

     while(true){
       maxVal = 0;

       motorRotationBase = MotorRotationCount(OUT_A);

       OnFwd(OUT_A, moveDir*30);
       while(abs(MotorRotationCount(OUT_A)-motorRotationBase) < 360){
         if(Sensor(IN_3) > maxVal){
           maxVal = Sensor(IN_3);
           maxDir =  SensorHTCompass(IN_2);
         }

       }
       Off(OUT_A);

       Wait(1000);

       OnFwd(OUT_B, moveDir*30);
       while(abs(maxDir -  SensorHTCompass(IN_1)) > 30);
       Off(OUT_B);

       NumOut(0, 0, maxDir, 1);
       NumOut(50, 0, SensorHTCompass(IN_1), 0);

       moveDir *= -1;
       Wait(5000);
     }
```



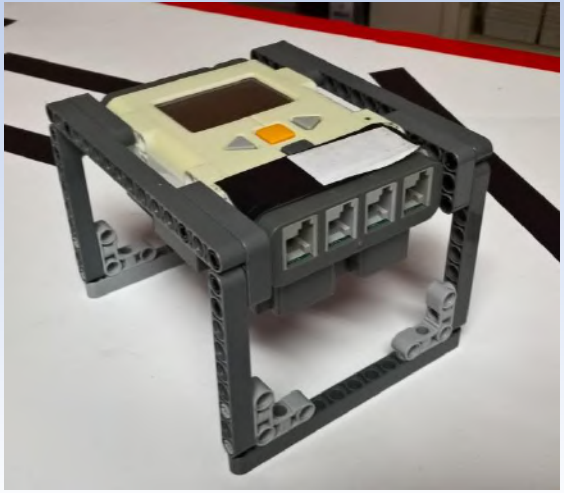
Mobilrobot - programozó Országos Csapatverseny-2016

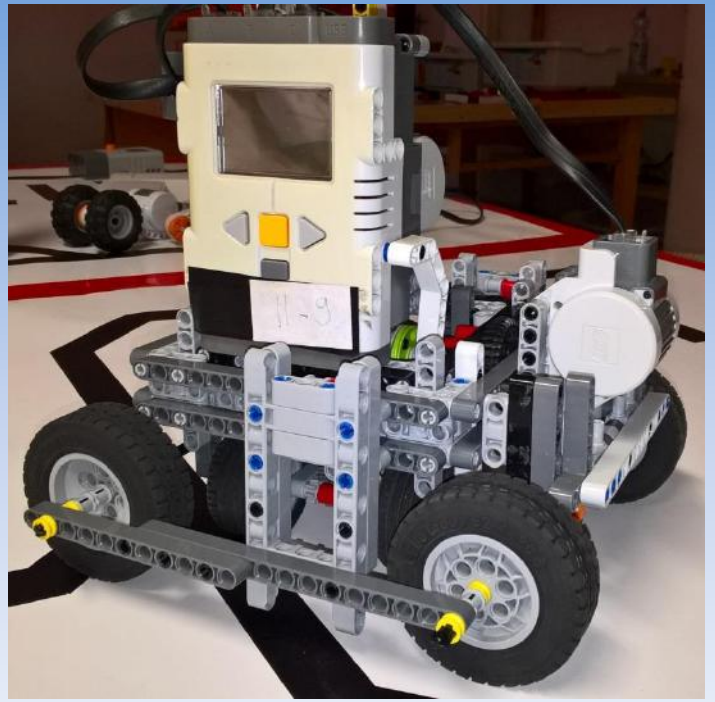


GIS

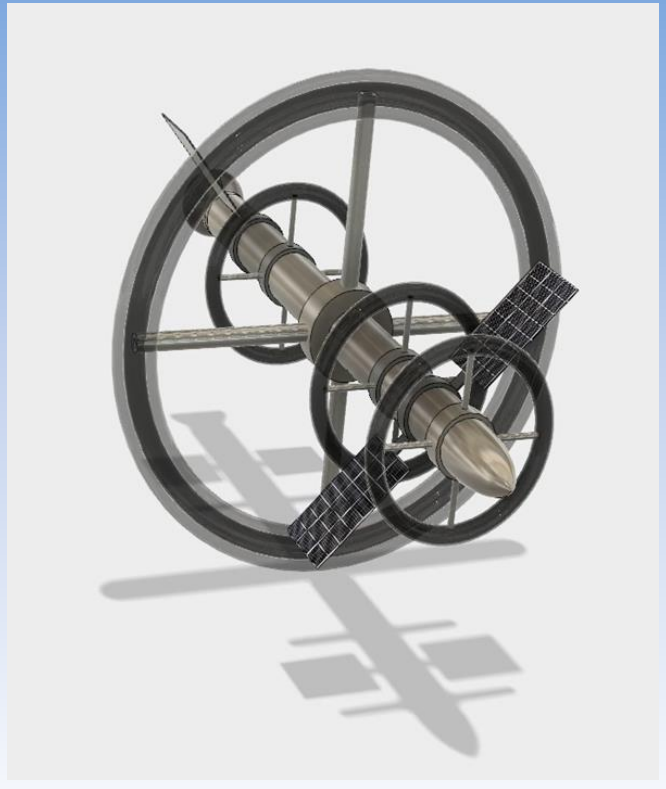


Mobilrobot - programozó Országos Csapatverseny-2016





Sustainergy 5 - Eilat, Izrael



Sustainergy 5 - Eilat, Izrael

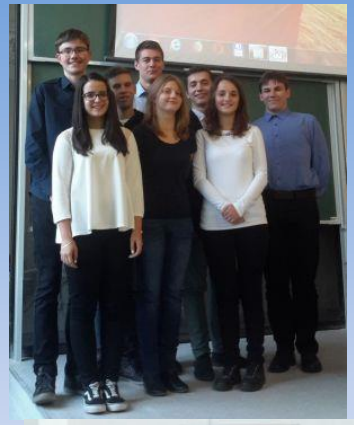
Tudományos ismeretterjesztés, disszemináció

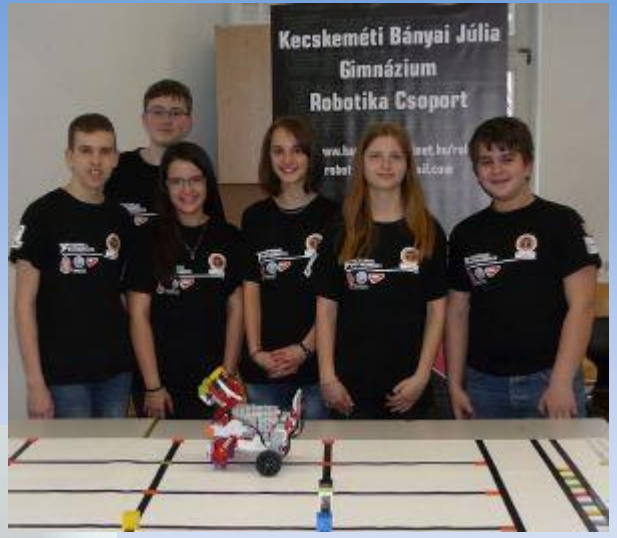
- 2017 MobElitas konferencia, Zalaegerszeg
- 2017 I. NFTÖ Alumni Találkozó
- 2017 Robotika Óvodától Egyetemig Országos Konferencia
- 2016 National Instruments Félévzáró Mentorkonferencia
- 2015 IVSZ Menta

- Kutatók éjszakája

- Lego WeDo 1.0 oktatási segédlet
  http://hdidakt.hu/letoltheto-anyagok/

Tudományos ismeretterjesztés, disszemináció





Köszönöm a figyelmet!

Thank you for your attention!