

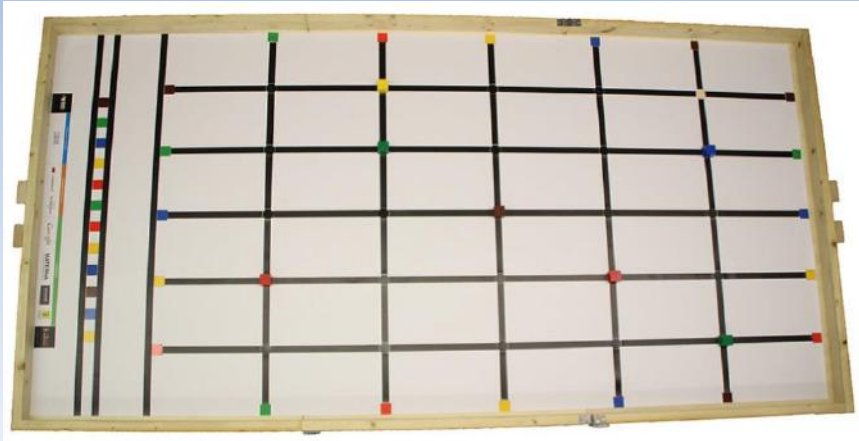
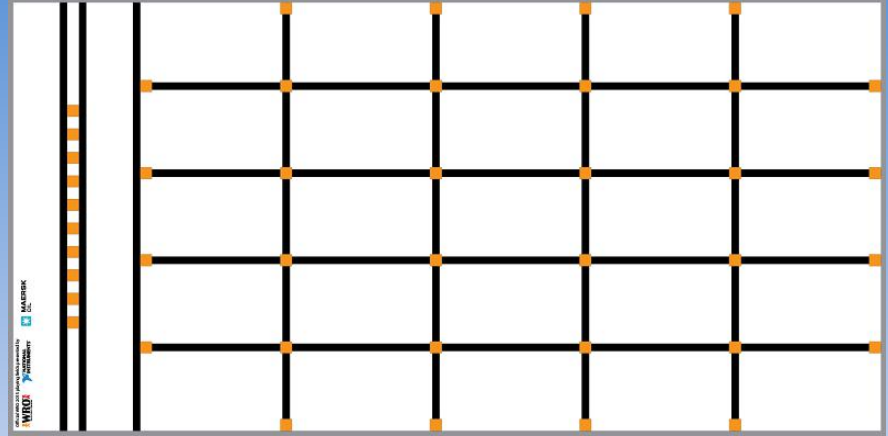


Robotika, a 21. század vezető tudománya

Nyíri Anna Eszter

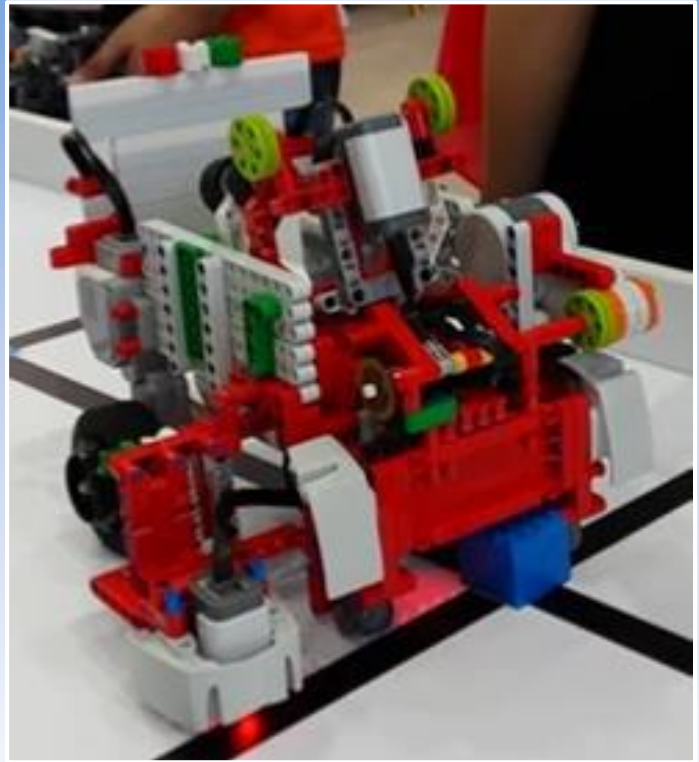
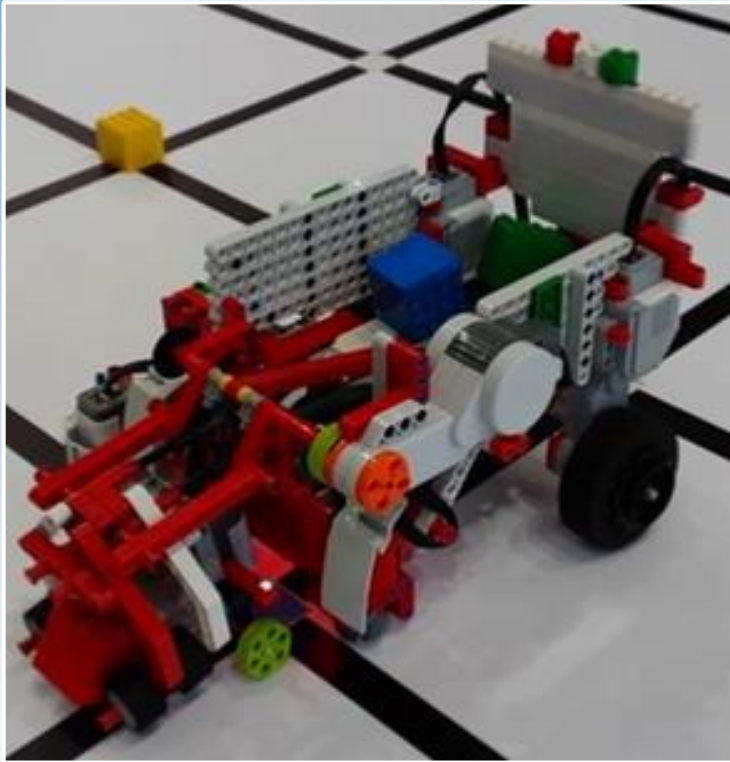


WRO - Doha, Katar, 2015

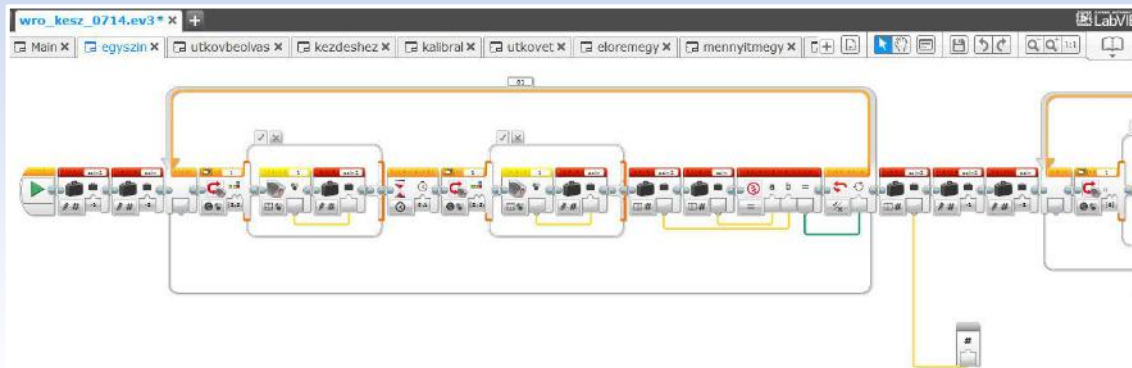
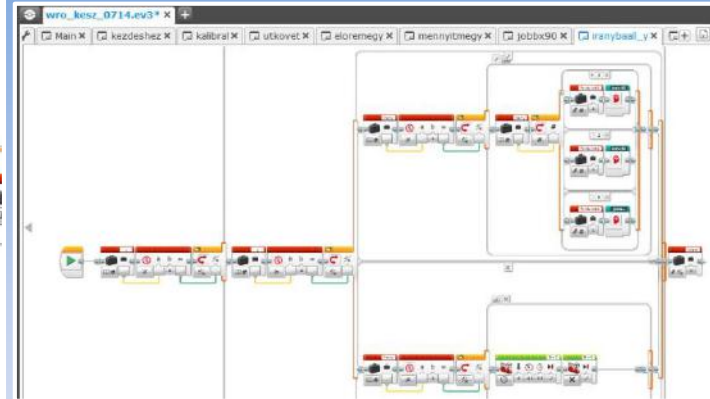
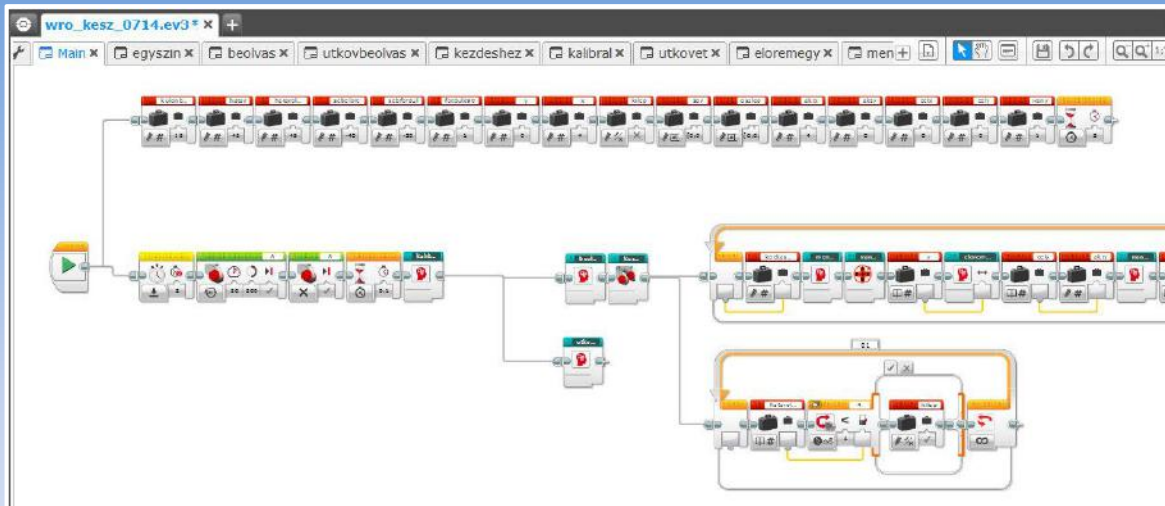


JUNIOR : TOP TEAMS					PTS	TIME
RANK	TABLE	COUNTRY	TEAM NAME			
1	885		TAIWAN BA-SOULBURN HO JIA	150	28.19	
2	84		CEPHEUS	150	60.37	
3	871		RB_VOLAT	150	61.81	
4	816		TS-2 SURATTHANI	150	81.69	
5	823		PI-RHO TECHNICS	150	87.06	
6	867		DZETA	145	40.10	
7	82		ROBOTECHIA VERSUS	140	36.72	
8	88		I-BOTS JUNIOR	140	111.34	
9	853		RX TREASURE EXPLORERS	130	48.28	
10	856		CHRONO BREAKER	130	64.44	
11	838		FLOBOTIK	130	74.75	
12	849		LEGOMANIA	130	79.66	
13	854		VB-NEON	130	91.35	
14	876		KID MAI AOK	130	116.56	
15	873		LE(T'S)GOROBODO	130	119.25	
16	83		SINTULU HAWKS JUNIOR	110	23.32	

WRO - Doha, Katar, 2015



WRO - Doha, Katar, 2015



WRO - San José, Costa Rica, 2017

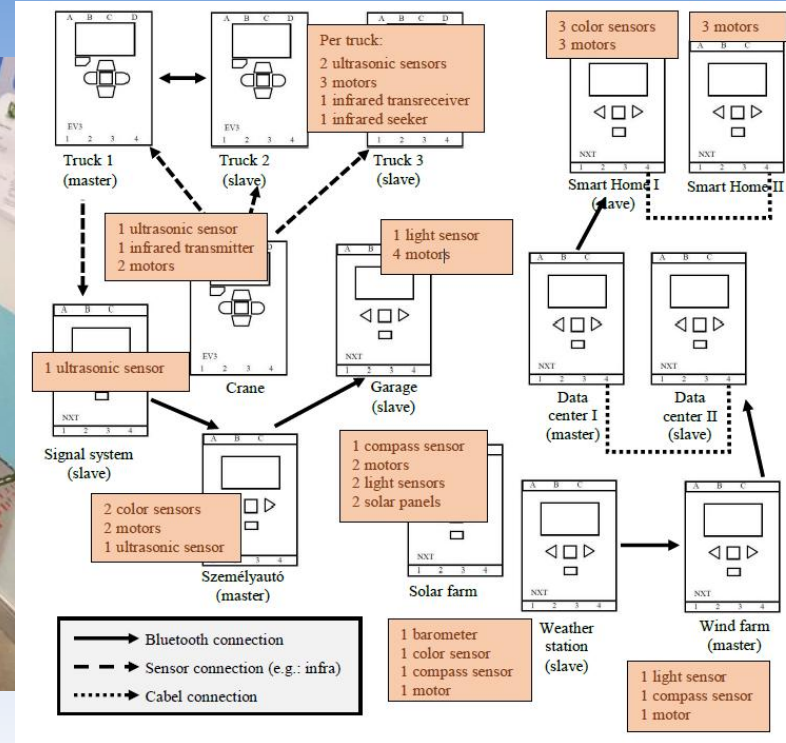


SKYNET CITY

Global City Controlling System



WRO - San José, Costa Rica, 2017



WRO - San José, Costa Rica, 2017

```
1 bool RoadFree=true;
2 int hatar=35;
3 int seb=15;
4 int diff=15;
5
6 task comm(){
7   while(true){
8     ReceiveRemoteBool(1,false,RoadFree);
9   }
10 }
11
12 void utkov(int x, int y){
13   ClearScreen();
14   NumOut(5,5,Sensor(IN_3));
15   NumOut(8,20,Sensor(IN_3));
16   if(Sensor(IN_2)>hatar){
17     if(Sensor(IN_3)>hatar){
18       OnFwd(OUT_BC,x+y);
19     }
20     else{
21       OnFwd(OUT_C,x+y);
22       OnFwd(OUT_B,x);
23     }
24   }
25   else{
26     if(Sensor(IN_3)>hatar){
27       OnFwd(OUT_C,x);
28       OnFwd(OUT_B,x+y);
29     }
30     else{
31       OnFwd(OUT_BC, x+y);
32     }
33   }
34 }
35
```

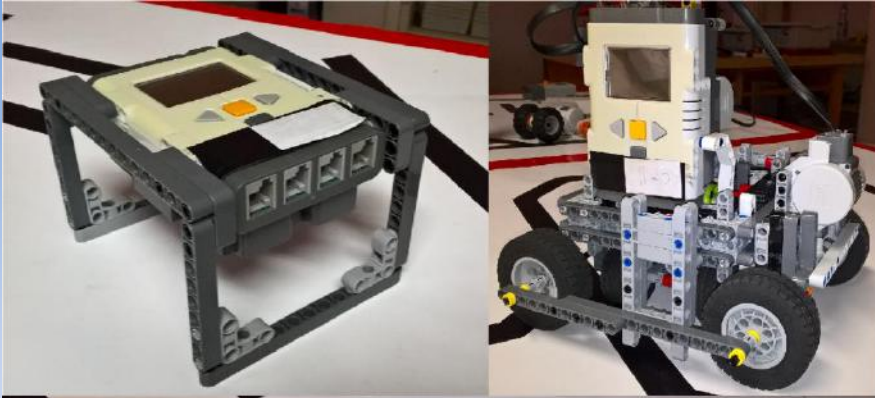
```
1 task roof()
2 {
3   int nap, fent=0; //0-->lent van
4   while(true)
5   {
6     ReceiveRemoteNumber(1, false, nap);
7     if (!fent && nap)
8     {
9       RotateMotor(OUT_A, (nap-0.5)*100, -173);
10      fent=1;
11    }
12    if (fent && !nap)
13    {
14      RotateMotor(OUT_A, (nap-0.5)*100, -173);
15      fent=0;
16    }
17    //NumOut(0,0,nap, true);
18    //NumOut(10,0,fent,true);
19    if(SensorUS(IN_1) != 255){
20      NumOut(10,10,SensorUS(IN_1),true);
21    }
22  }
23 }
24
25 task main(){
26   SetSensorLowspeed(IN_2);
27   SetSensorLowspeed(IN_1);
28   SetSensorTouch(IN_4);
29
30   StartTask(roof);
31 }
```

```
1 napelen.nxc
24 int motorRotationBase = 0;
25
26 StartTask(solarPower);
27
28 while(true){
29   maxVal = 0;
30
31   motorRotationBase = MotorRotationCount(OUT_A);
32
33   OnFwd(OUT_A, moveDir*30);
34   while(abs(MotorRotationCount(OUT_A)-motorRotationBase) < 360){
35     if(Sensor(IN_3) > maxVal){
36       maxVal = Sensor(IN_3);
37       maxDir = SensorHTCompass(IN_2);
38     }
39   }
40   Off(OUT_A);
41
42   Wait(1000);
43
44   OnFwd(OUT_B, moveDir*30);
45   while(abs(maxDir - SensorHTCompass(IN_1)) > 30){
46     Off(OUT_B);
47
48     NumOut(0, 0, maxDir, 1);
49     NumOut(50, 0, SensorHTCompass(IN_1), 0);
50
51     moveDir *= -1;
52     Wait(5000);
53   }
54 }
```

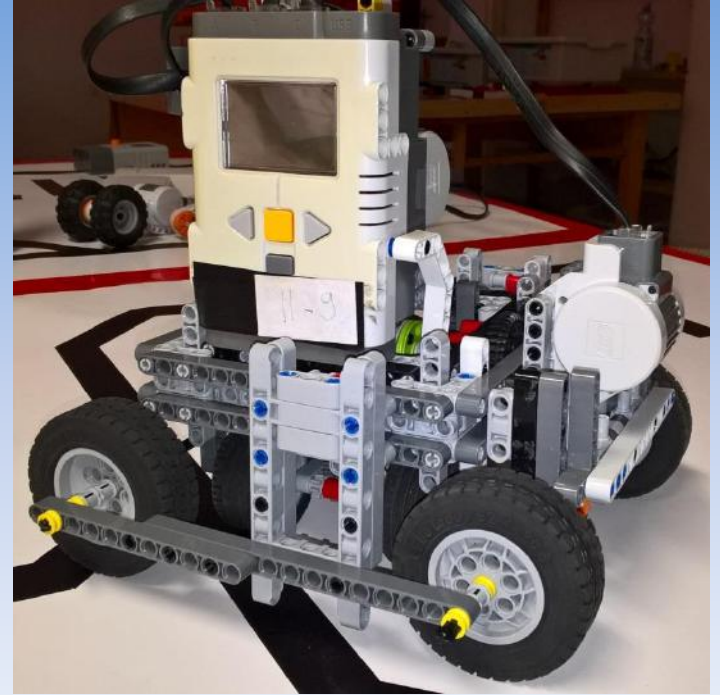
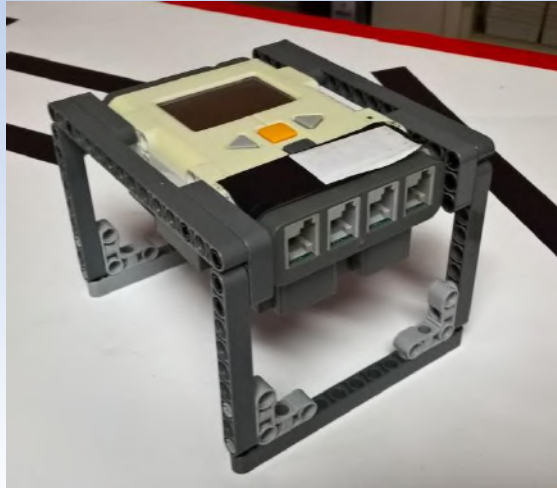


Mobilrobot - programozó Országos Csapatverseny-2016

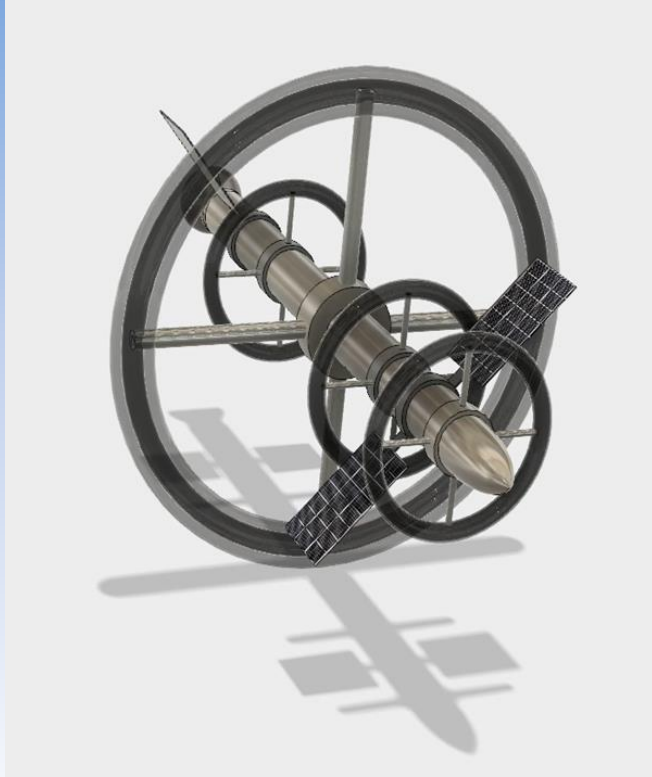
GIS



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!