

22.11.2018

## **'VEHICLES CHASING EACH OTHER' STANDARD COMMITTEE**

### **MEETING REPORT**

In this week's meeting, the committee focused on determinations of standards. The first thing to decide was the details of the communication process for the handshaking protocol. The committee already made a decision to make the communication based on wifi protocol. The process to achieve peer to peer wifi communication should contain the matters given below:

- ID

Static IP's are going to be gotten by the competitors. The structure of those IP will be like, "192.168.1.ID". These ID's will have values from 2 to 22.

- The first transmitter will be the chasing one (the follower).

- Catching message (2 bit):            Related LEDs

00: 'Caught!'                    Red

01: 'Okay, you caught!'       Green

10: 'Let's stop!'                Blue

11: 'No, you didn't catch me!'    Yellow

- Verification Code: ID + Catching message(2 bits)

The second topic that is discussed in this meeting was the path. The color, material and the shape of the path is discussed. At first, the colors to be avoided are determined. Those were black, dark gray, white, beige and red because of the possible places where the robots might race. According to one of our group's research, the green color may be detected clearly in different conditions of light and place. The committee is decided to go further on this advice and green is selected to be the color of the path. Secondly, the material of the path is discussed. The committee did not decide the material yet but the things to be considered are decided as below:

- Tatami Foam Tiles (Kreş Matı)

- Medium Density Untempered Hardboard (MDF)

- Rubber (Kauçuk)

- Sandpaper (Zımpara)

- Styrofoam (Strafor)

- Anti-slip tape (Kaydırmaz Bant)

In addition to the material of the path, the shape of edges is decided. The committee members specified the edges to be sharp instead of curvy ones.

### **This Week's Assignments**

The teams are assigned to prepare a full report about the handshake protocol with a clear definition. Besides, each group has to make some research on those materials given and they are going to decide one of the materials listed till November 26th, 2018. Moreover, each group will make a specification for the appearance of the back and front sides of the vehicles to be sensed by the competitor. This decision will take place in individual weekly reports of each group.