

Experiment report:

The RoboMaster S1 bridges the digital world with the real one, bringing abstract theories to life through practical operations. The S1 supports Scratch and Python programming languages.

In our project we used Python language, and we wrote some components that show the robot's abilities. We learned how to use the RoboMaster API and from it we created autonomous abilities for the robot.

There are other abilities in the project (see in our [GitHub](#)) but in this report we tested the following abilities:

1. Follow and shot person.
 - a. Link to the experiment video:
<https://youtube.com/shorts/wKOpfwJcW9Q?feature=share>
2. Follow and shot robot.
 - a. Link to the experiment video:
3. Follow and shot marker.
 - a. Link to the experiment video:
<https://youtube.com/shorts/FXZyLtb0pik>

In this report we will present two important parameters in each component:

1. The time it took for the robot to identify the object
2. The time it took for the robot to reach it.

Task:	Detection time:	Arrival Time:
Follow and shot person:	00:02.84 seconds	00:09.85 seconds
Follow and shot robot:	00:03.21 seconds	00:10.19 seconds
Follow and shot marker:	00:05.20 seconds	00:10.03 seconds

It can be seen from the process that the robot took longer to identify the symbols than to identify the person figure or the robot figure, it can cause because the symbols is much smaller and it is harder to spot it outside. We can say that the robot knows how to deal with terrain conditions (such as sunlight and darkness) but this can affect the detection times of the robot.

Reporters:

Liav Weiss - 206158651

Amichai Kafka - 31248699

Omer Michael - 316334671

