

Maze Leopard

Rescue maze entry

MEMBRI DEL TEAM

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MECHANICAL DESIGN

The robot consists of one main piece onto which everything else is mounted to:

- Motors
- Eletronics
- Kit dropper
- Laser and color sensors
- Front switches

THE ROBOT



Most of the robot uses Torx T10 M3 bolts, anti-vibration washers and M3 nuts.

SOFTWARE

The library with which the robot is controlled was written by us in C/C++. The navigation was written in C++ and the artificial intelligence for victim recognition was written in Python.

VICTIMS DETECTION

To recognize both colors and letters, we used the OpenMV Cam H7 Plus.

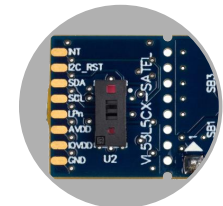


DROPKIT

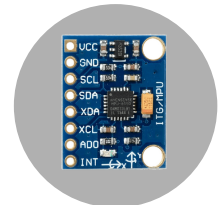
We use a positional servo to drop the kits.

SENSORS

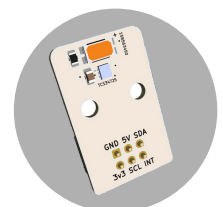
VL53L5CX



MPU6050



Custom by Davide



Micro switch

