

Kavosh Team Description Paper

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1 Introduction

The Kavosh robot team has chosen working on rescue robot as his technical activity in the youth Roboclub.

Generally we can classify the robot in to three sections: mechanics, electronics & hardware and software.

2 Mechanics

In mechanics by selecting the chain tread system the robot is able to pass through different stunts and paths. There is a revolving arm and a watchtower for better vision and performance of robot.

3 Electronic & Hardware

In designing the circuits the most important factor has been safety. We have three cameras, two of them are fixed and another one is on a PTZ.

Also robot has a sound processing system that can define the direction of the victim.

There is an IR camera on the robot, which is installed on the pan-tilt.

4 Software

The software of the system consists three modules: positioning, communication, and user interface. The communication module is installed on host and robot system, positioning and user interface are installed on the host. We can also have a map of the field and the victims.

5 Conclusion & Future Works

We are working on developing this robot for the future. By the expandability and scalability of the software and hardware systems it's possible to have a Multiagent rescue robot and also with processing the pictures of IR camera we will be able to detect most of the victims.