



Team YILDIZ

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RoboCupRescue
Application for Practice

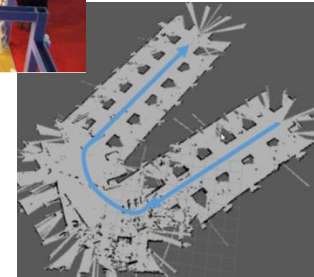


AUTONOMOUS ROBOT DESIGN

- 4 Wheeled chassis equipped with :
 - 4 geared motors
 - Targeted control circuit
 - i7pro notebook with SSD



NAVIGATION AND MAPPING

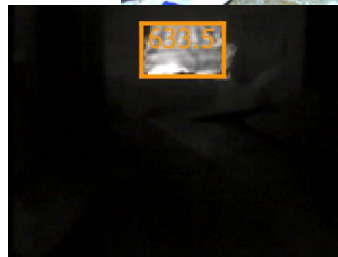


- Grid Mapping adapted from Hector Mapping code which uses Hokuyo laser range finder and IMU sensors
- Navigation uses laser and ultrasonic rangars

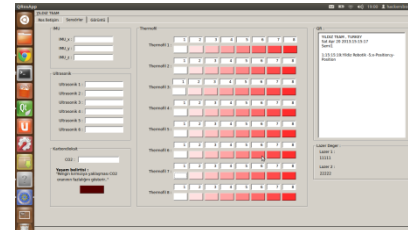
- To identify victims primarily RGB-D images are used and matched with thermophile data



- To read QR codes use RGB image obtained from Kinect sensor



VICTIM AND QR CODE IDENTIFICATION



MONITORING AND CONTROL

- Team focuses on Autonomy
- One joystick button is used to stop the robot in emergency cases
- User Interface is used to monitor sensor data and the map generated by the autonomous vehicle
- Use of ROS Framework