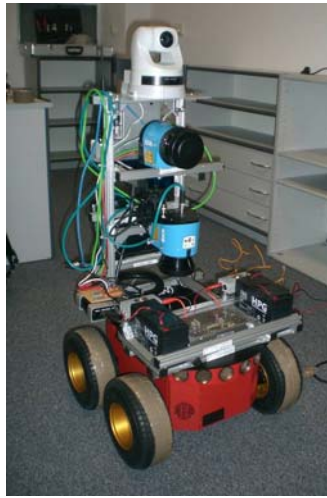


Team Information

TEAM: IAIR



Picture of vehicle:

Name of vehicle:

SARA & QUAD



Picture of team leader:

Name of team leader:

Janusz Będkowski

Team Name:

IAiR

Team E-mail:

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Website:

<http://iair.mchtr.pw.edu.pl/nw/index.php>

Location:

Warsaw, Poland

Institution/Company:

Warsaw University of Technology

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Telephone:

++48 501 090 020

Fax:

-

Team Description:

The IAiR team entry into the CELROB2011. The team is composed of Ph.D., Ph.D. and M.Sc. students from Institute of Automation and Robotics in Faculty of Mechatronics Warsaw University of Technology under the leadership of Janusz Będkowski (supervised by prof. Andrzej Masłowski). Our vehicles are called SARA and QUAD. SARA and QUAD can be

Team Information

controlled remotely and it can navigate autonomously. SARA is composed by on-the-shelf components such as mobile platform PIONEER 3AT and sensors such as lasers LMS 100, AXIS Ethernet camera, wireless communication device, 3DOF inertial measurement unit. While moving, the environment is perceived through four laser range finders (also 3D cloud of points is available), and monocular vision system. Currently the KINECT based perception is under development to obtain on-line obstacle avoidance during CELROB-2011.

The development of the SARA system began in 2010. At the time the of the initial team application, the vehicle is fully functional and has performed of autonomous trials along a test course.

QUAD is composed by on-the-shelf components such as quad mobile platform, Sick Laser LMS 100, KINECT XBOX 360 and X-SENS Mti-G (GPS-aided AHRS). For CELROB'11 purpose additional 3D laser range finder based on rotated LMS 200 will be integrated.

Sponsors:

Warsaw University of Technology, ...

Selection of scenario:

1. Reconnaissance and surveillance
2. _____
3. _____
4. _____

Proof of citizenship:

A copy of team leader passport will do (will not be published)!