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SYSTEM SOFTWARE FOR ROBOTICS APPLICATIONS

TECHNOLOGIES FOR DEVELOPERS AND OPERATORS OF ROBOTICS SOLUTIONS AND COMPONENTS MANUFACTURERS

Core competencies

– Localization
– Navigation
– Obstacle avoidance
– Sensor fusion
– System integration of hardware and software components

Main benefits

– Improved robustness and safety of systems
– Precise and reliable localization
– Reduction of resources and training costs for controlling and coordinating heterogeneous multi-agent systems
– Enhancement of energy efficiency through suitable algorithms

Our technologies

On the basis of application-specific requirements we choose the optimal mix out of a broad range of technologies:

– Localization technologies (GPS, GLONASS, Galileo, WiFi): both low-cost and high-end receivers, commercial and own solutions
– Robotic Operating System (ROS)
– Distance sensors (ultrasonic, infrared, laser scanner)
– Smart energy control (battery management)
– Image processing (Stereo, Depth- and Time-of-flight camera)
– (semi-) autonomous control system
Application examples

- Security (e.g. fire service)
- Surveillance of grounds or objects (e.g. container terminals, large construction sites)
- Measuring and revising parameters (e.g. detection of air pollution, measurement of gas concentration)
- Mobile explorer system (e.g. SAR)
- Geofencing
- Machine control

We offer

- Technological support for enterprises
- Feasibility studies
- Software licensing
- Evaluation of systems and technologies
- Development of components
- System development and integration
- Simulation environment for algorithm verification

You have an idea, an unsolved problem or need technical advice? We would be pleased to support you.