

Sustainable Urban Robotics Technologies for Smart Cities

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ABSTRACT

The core technologies and their implementations to provide various services in the smart cities will be introduced, mainly focusing on localization, autonomous navigation, and monitoring technologies. For autonomous navigation, a lot of researches including vision-based and wireless SLAM (Simultaneous Localization And Mapping) will be discussed. For structural health monitoring (SHM), a wall-climbing drone was developed and some inspection examples will be introduced. For environmental monitoring, JEROS (Jellyfish removal robot), oil spill protection robot, green algae removal robot were developed and will be introduced.

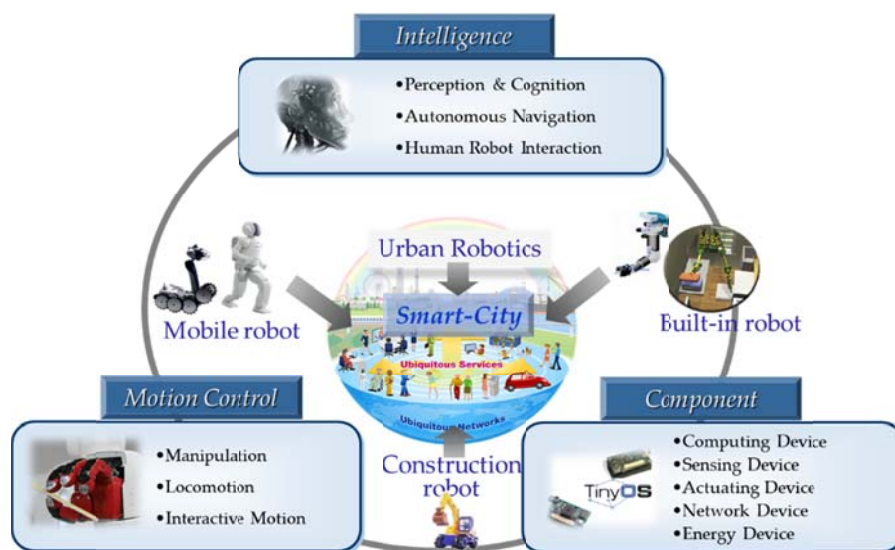


Fig. 1 Core technologies of urban robotics

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