

NEXT LEVEL INNOVATION IN ROBOTICS AND AUTONOMY

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Title: Autonomy for Field and Service Robots: Design Challenges and Developmental Issues

Design and development of autonomous robots to meet the ever increasing demands of the society is one of the key issues in the current-day robotics. The rapid modernization of the world necessitates new types of robots and robotic solutions in the service sector. The new trends in robotics research have been denominated by field and service robotics because of the general goal of getting robots closer to human social needs. Providing autonomy to a field/service robot is a challenging task as the environment is highly unstructured and the tasks are not well defined.

Some of these challenges will be discussed in this presentation and a case study of developing an autonomous underwater robot will be elaborated.