

Cooperative Robot and User Friendly Robot- New Challenge in Robotics

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Abstract

In the near future many aspect of our life will be encompassed by tasks performing in cooperation with robot. The application of robot in home automation, agriculture production and medical operations etc will indispensable. As a result robot needs to be made human-friendly and to execute tasks in cooperation with human. Researchers proposed many new field of research in Robotics. Cooperative robotics and User friendly robotics are two new area of robotics research. Some researcher is trying to make human like robot. Robots that will be imitate human characteristics in movement, learning etc. Other researchers trying to develop robots which will be entertain human. Another group trying to develop robots and/or control system or robots those will be work cooperatively. In this paper it is tried to gather information regarding these two fields in brief.

The cooperative robots and user friendly robots are directly or/and indirectly interact with human. Therefore, human characteristics such as faces, voices, gesture, and movements play an important role in design and control of such robots. The more human-like the robot appears, the higher the expectations of people interacting with it are. All the aspects of human, physical, movements and sensing ability, interacting with environment must be considered to design user friendly and cooperative robots.

Biography

Dr. Md Mozasser Rahman Currently is an Assistant Professor in Department of Mechatronics Engineering, International Islamic University Malaysia (IIUM). Dr. Mozasser received a B. Sc. Eng. degree from Bangladesh Institute of Technology (BIT) Khulna in Mechanical Engineering in 1988. After graduation he worked for same institute as a lecturer. He got many practical knowledge and experiences in industrial maintenance and automation. He was later conferred a M. Eng. degree and Ph. D. from Mie University, Japan, in 2000 and 2003, in Mechanical Engineering and System Engineering, respectively. Dr. Mozasser has expertise in Robotics and Industrial Automation. His research area covers human-robot cooperation, movement characteristics of human arm, artificial human organ etc. He serves consultation and testing about Automation, Industrial Maintenance to universities and industries.