

عنوان مقاله:

Design & Development of a low Cost Robot for Assistance of Disabled as well as Aged Person

محل انتشار:

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نویسنده:

Soumya Kanti Manna - Assistant Professor, College of Engineering & Management, Kolaghat, India

خلاصه مقاله:

People are now using robotic manipulator for industrial purpose in car manufacturing and automation industry. This paper is dedicated to give a concept of utilizing mobile manipulator for the assistance of aged people and partially paralyzed person. The robot will be controlled with a simple TV remote controller or with a simple PC based system to make the system handy, user-friendly and cost-effective. Here all the functions of manipulator are being configured according to a particular switch of Philips remote controller. Control will be done following RC5 protocol which is generally used by Philips. It is a simple control system where joints are being controlled independently without taking care of proper dynamics. It will make computational work easy and will take less time to perform. It is basically a prototype which is been manufactured for the analysis purpose. Forward and inverse kinematics is being done to find the mobility and range of manipulator. A simulink model of manipulator is being designed in sim-mechanics platform to analyze the torque level of particular joint. In the next section embedded system required for make system working .is shown with detailed figures

کلمات کلیدی:

Mobile manipulator robot, RC5 protocols, Remote control, Kinematics, Embedded system, GUI

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