Abstract

Nowadays controllers are one of main topic in engineering and researchers are to seek the produce simpler controller, so Body Gesture can be a good choice and it is one of popular way. This paper narrates the all proceeding of designing a system for control of a servo motor angle control using by body gesture of user. Hardware structure was wholly designed and implemented for this aim. Hardware structure was designed by an interface circuit that is based on microcontroller Atmega8 for analyze the data and generate command also circumambient architecture for control movement of different angle of the servo motor. For operate the servo motor were used Kinect. Kinect is used for receive information from user and provide communication between user and computer then send information of angle of servo motor to microcontroller. For suitable interaction for controlling servo motor by user, was created Graphic User Interface in visual C#. The main objective of this paper was to servo motor controlled by users without any background. No training is needed to user for controlling servo motor like traditional controller.
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- Xin Liu , Yongtian Wang , Yue Liu , Dongdong Weng, and Xiaoming Hu, (2009), A Remote Control System Based on Real-Time Image Processing, 5th International Conference on Image and Graphics (ICIG &apos;09), September 20-23, Xi&apos;an, China, pp. 763-767.
- Chui Yew Leong, and Abdul Rahman Ramli, (2011), Development of a real-time embedded remote triggering and monitoring system with SC12, Intelligent Systems and Robotics Laboratory (ISRL), Institute of Advanced Technology, March 5, Universiti Putra Malaysia. 43400 Serdang, Selangor.
- J. F. Gieras, R. J. Wing, (2009), Permanent Magnet Motor Technology Design and Applications, August 26, Marcel Dekker Inc. , New York, USA.
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