Abstract

Through this paper presents the development of a controller for a Scorbot Er-4udidactic manipulator, using a vision system communicating via the USB port. Considerate that nowadays, robotics is an essential element for the automatization in manufacturing process. As particular advantage over other systems, failure to use interfaces that involves development of additional hardware controller itself. Also, should the question arise, of improve a new form of generate trajectories through Minimum Euclidian Distance (MED). This results yielded handling objects, plus the ability to perceive the environment through the artificial vision system using image processing and MED, in order to generate information elements surrounding the manipulator, allowing the robot classify objects in your workspace, establishing a fine line between reachable and skilful.

References

- Intelitek ®, &quot;Scorbot-Er 4u, User Manual&quot;, Copyright ©2001 Intelitek ® Inc.
Vision System via USB for Object Recognition and Manipulation with Scorbot-ER 4U

Catalog #100343 Rev. B. September 2001.
- Almanza, O. D., "Implementación de la estrategia de juego Tic-Tac-Toe para la interacción con un brazo robótico", Avances en Inteligencia Artificial, ISSN: 1870-4069, IPN.

Index Terms

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