Abstract

This paper suggests a navigation structure in three dimensions space based on an intelligent system of a robot several links. The proposed planning system is consisted of several links and separation fuzzy logic stages which control autonomously every manipulator joint. The aim is to move the arm from a required configuration to a desired goal configuration. Two tests are run and modeled in MATLAB. Simulation results show good performance for the proposed scheme that the robot reaches the goal configuration successfully with minimum error and different program iterations in each run in terms of joints angular position respectively for several links in space.

References


Index Terms

Computer Science  Artificial Intelligence
Keywords

Joint space, path planning, fuzzy logic, planner robot arm, several links.