PRECISE TRACKING CONTROL OF ROBOT MANIPULATOR USING FUZZY LOGIC

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Abstract

This paper describes a fuzzy position control scheme designed for a three-link manipulator. The proposed control scheme is based on nonlinear dynamic model derived using Lagrange-Euler formulation. This fuzzy controller controls the position of each link independently and provides compensation for gravity acting on the third link. Computer simulation results on three link robot manipulators are presented to show the results, which indicate good position tracking performance.

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