

عنوان مقاله:

Position Controller Synthesis for The Redundant Hydraulic Shoulder Manipulator

محل انتشار:

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خلاصه مقاله:

In this paper, position control has been designed for a 3 DOF actuator redundant spherical parallel manipulator. A two norm minimization approach has been used to resolve the actuator redundancy problem. Robust stability of the closed loop system is analyzed considering uncertainties inherent in the dynamic model of the manipulator. A simulation study is also performed to show the effectiveness of the proposed method. The results show the applicability of simple and conventional controllers to control redundant spherical parallel manipulators.

کلمات کلیدی:

Index Terms - Parallel manipulator, Robust Position Control, Redundancy, Force Distribution, Computed Torque

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