

Designing a Robust Controller for a 6 Linkage Robot

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Abstract : One of the main points of application of the mechanisms of the series and parallel is the subject of managing them. The control of this mechanism and similar mechanisms is one that has always been the intention of the scholars. On the other hand, modeling the behavior of the system is difficult due to the large number of its parameters, and it leads to complex equations that are difficult to solve and eventually difficult to control. In this paper, a six-linkage robot has been presented that could be used in different areas such as medical robots. Using these robots needs a robust control. In this paper, the system equations are first found, and then the system conversion function is written. A new controller has been designed for this robot which could be used in other parallel robots and could be very useful. Parallel robots are so important in robotics because of their stability, so methods for control of them are important and the robust controller, especially in parallel robots, makes a sense.

Keywords : 3-RRS, 6 linkage, parallel robot, control

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