عنوان مقاله:

Kinematic Synthesis of Parallel Manipulator via Neural Network Approach

محل انتشار:

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خلاصه مقاله:

In this research, Artificial Neural Networks (ANNs) have been used as a powerful tool to solve the inverse kinematic equations of a parallel robot. For this purpose, we have developed the kinematic equations of a Tricept parallel kinematic mechanism with two rotational and one translational degrees of freedom (DoF). Using the analytical method, the inverse kinematic equations are solved for specific trajectory, and used as inputs for the applied ANNs. The results of both applied networks (Multi-Layer Perceptron and Redial Basis Function) satisfied the required performance in solving complex inverse kinematics with proper accuracy and speed

کلمات کلیدی:

Parallel Robot,Kinematics,Artificial Neural Network