Abstract

The paper proposes a method using Shuffled Frog Leaping Algorithm (SFLA) to identify dynamic parameters of MOTOMAN UP6 robot manipulator. In this paper, the physical parameters of UP6 including mass, inertia, frictions of the first three joints will be estimated directly without parameterization. SFLA method is also used to find the optimal excitation trajectories. Simulated results verify the effectiveness of SFLA approach, and show that the proposed method achieves a high accuracy.

References


10. Industrial Robot MOTOMAN-UP6, MOTOMAN ROBOTICS EUROPE AB.


Index Terms

Computer Science

Information Sciences

Keywords
Dynamic Parameter Identification of UP6 Robot Manipulator using SFLA

Optimization, SFLA, Identification, Manipulator.