

عنوان مقاله:

An On-line Fuzzy Backstepping Controller for Rotary Inverted Pendulum System

محل انتشار:

اولین کنگره مشترک سیستم های فازی و سیستم های هوشمند (سال: 1386)

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خلاصه مقاله:

In this study a new combination of nonlinear backstepping scheme with on-line fuzzy system is presented for the rotary inverted pendulum system to achieve better performance in nonlinear controller. The inverted pendulum, a popular mechatronic application, exists in many different forms. The common thread among these systems is their goal: to balance a link on end using feedback control. The purpose of this study is to design a stabilizing controller that balances the inverted pendulum in the upright position.

کلمات کلیدی:

Nonlinear backstepping, Fuzzy approximator, Rotary inverted pendulum

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