Design of a CMAC-Based Smooth Adaptive Neural Controller with a Saturation Compensator 顏名慶, Chun-Fei Hsu, 鍾英漢 Electrical Engineering Engineering ihchung@chu.edu.tw

Abstract

In the conventional CMAC-based adaptive controller design, a switching compensator is designed to guarantee system stability in the Lyapunov stability sense but the undesirable chattering phenomenon occurs.

Keyword: Chua's chaotic circuit, DC motor driver, CMAC neural network, Adaptive control, Neural control