FUZZY SUPERVISORY CONTROL OF A DSP-BASED MAGNETIC LEVITATION SYSTEM

Jen-Hsing Li

ABSTRACT

This paper proposes a fuzzy supervisory control of a magnetic levitation system which the eZdsp F2812 is utilized as a controller. The discrete-time model of the magnetic levitation system is derived and the stability is guaranteed by the root locus methodology. A fuzzy supervisory control is used to compensate for system nonlinearities.

KeyWords: Magnetic levitation system, digital signal processor, fuzzy supervisory control.