

عنوان مقاله:

A New T-S Fuzzy Tracking Controller for Uncertain and Disturbed Nonlinear NCSs with H_∞ Criterion Based Observer

محل انتشار:

بیستمین کنفرانس مهندسی برق ایران (سال: 1391)

تعداد صفحات اصل مقاله: 6

نویسندگان:

(Mohammad Azimi - Tarbiat Modares University (TMU

Mohammad Taghi Hamidi Beheshti

Hadi Kasiri

خلاصه مقاله:

This paper investigates the fuzzy tracking control problem for a class of uncertain nonlinear networked control systems (NCSs), which can be represented by a T-S fuzzy model with external disturbances. In transmission both network induced delay and packet dropout are considered. The control scheme is based on the parallel distributed compensation (PDC) structure, a fuzzy observer and H_∞ performance to attenuate the external disturbances; the stability of the whole closed-loop model is provided using a general Lyapunov–Krasovskii functional. The key point of the proposed approaches is to achieve conditions under a linear matrix inequalities (LMI) formulation. Finally, numerical examples and simulation results are given to illustrate the effectiveness of the method.

کلمات کلیدی:

tracking control, networked control system (NCS), T-S fuzzy model, Linear Matrix Inequality (LMI), observer

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/154260>

