

论文与报告

不确定时滞模糊系统的鲁棒 H_∞ 网络控制

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收稿日期 2006-5-11 修回日期 2006-7-20 网络版发布日期 接受日期

摘要

A robust H_∞ networked control method for Takagi-Sugeno (T-S) fuzzy systems with uncertainty and time delay is presented. A state feedback controller is designed via the networked control system (NCS) theory. Sufficient condition for robust stability with H_∞ performance is obtained. Network-induced delay in network transmission and packet dropout are analyzed. Simulation result shows the validity of this control scheme.

关键词 [Robust \$H_\infty\$ networked control](#) [Takagi-Sugeno fuzzy systems](#) [networked control system theory](#) [network-induced delay](#)

分类号

H_∞ Networked Control for Uncertain Fuzzy Systems with Time-delay

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Abstract

A robust H_∞ networked control method for Takagi-Sugeno (T-S) fuzzy systems with uncertainty and time delay is presented. A state feedback controller is designed via the networked control system (NCS) theory. Sufficient condition for robust stability with H_∞ performance is obtained. Network-induced delay in network transmission and packet dropout are analyzed. Simulation result shows the validity of this control scheme.

Key words

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DOI: 10.1360/aas-007-0726

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