عنوان مقاله:

Adaptive Sliding Mode Observer For Reconstructing The Actuator Fault

محل انتشار:

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نویسندگان:

Parisa Ansari Bonab - *Dept. of Electrical and Robotics Engineering Shahrood University Shahrood, Iran*

Mohammad Ali Sadrnia - *Dept. of Electrical and Robotics Engineering Shahrood University Shahrood, Iran*

خلاصه مقاله:

This paper proposes a special sliding mode observer, adaptive sliding mode observer, for fault reconstruction issue. For this purpose, a nonlinear sliding mode observer is utilized and the inherent equivalent output error injection feature of it is exploited to reconstruct the actuator fault. For reconstructing the fault signal by using of this term the upper bound of fault should be known, to overcome this restriction an adaptation law is obtained until produce the upper bound of fault signal. The proposed fault reconstruction approach is only based on the available plant input/output information. Finally the simulation results on Boing 747 aircraft are presented to demonstrate the approach.

کلمات کلیدی:

Fault estimation, Sliding mode observer, Equivalent output error injection signal, Adaptation law

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