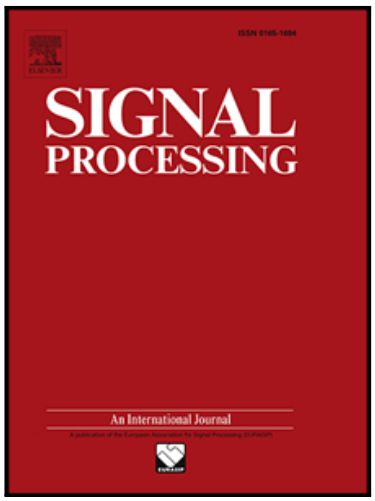

Event-Triggered Fault Detection Filtering for Discrete-Time Markovian Jump Systems

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Highlights

The main contributions of this paper are highlighted as follows.

- By introducing an event indicator, the sampling frequencies or communication of the systems are reduced, i.e., the signal transmission pressure in the resulting system is reduced.
- The procedure for the required FDF is efficiently handled, and the sufficient conditions for the system to satisfy the stochastic stability and the performance indices of H∞ performance are provided.
- The discriminant conditions in this paper are linear matrix inequality constraints, and the resulting fault detection filtering problem can be addressed by the optimization tool.