



Distance rejection in a bayesian network for fault diagnosis of industrial systems

Submitted by Emmanuel Lemoine on Thu, 01/30/2014 - 14:53

Titre	Distance rejection in a bayesian network for fault diagnosis of industrial systems
Type de publication	Communication
Type	Communication avec actes dans un congrès
Année	2008
Date du colloque	2008
Titre du colloque	16th Mediterranean Conference on Control and Automation, MED'08
Titre des actes ou de la revue	16th Mediterranean Conference on Control and Automation, MED'08
Pagination	615 - 620
Auteur	Verron, Sylvain [1], Tiplica, Téodor [2], Kobi, Abdessamad [3]
Pays	France
Ville	Ajaccio
ISBN	978-1-4244-2504-4 / 978-1-4244-2505-1
Mots-clés	automatic control [4], Bayes methods [5], Bayesian network [6], Control Systems [7], distance rejection [8], Electrical equipment industry [9], error statistics [10], fault detection [11], fault diagnosis [12], Industrial control [13], industrial process diagnosis [14], industrial systems [15], minimal recognition error rate [16], Monitoring [17], Principal component analysis [18], process control [19], process monitoring [20], Tennessee Eastman Process [21]
Résumé en anglais	The purpose of this article is to present a method for industrial process diagnosis with Bayesian network. The interest of the proposed method is to combine a discriminant analysis and a distance rejection in a bayesian network in order to detect new types of fault. The performances of this method are evaluated on the data of a benchmark example: the Tennessee Eastman Process. Three kinds of fault are taken into account on this complex process. The challenging objective is to obtain the minimal recognition error rate for these three faults and to obtain sufficient results in rejection of new types of fault.
Notes	Date du colloque : 06/2008
URL de la notice	http://okina.univ-angers.fr/publications/ua1689 [22]
DOI	10.1109/MED.2008.4602050 [23]
Lien vers le document en ligne	http://dx.doi.org/10.1109/MED.2008.4602050 [23]

Liens

[1] <http://okina.univ-angers.fr/sylvain.verron/publications>

- [2] <http://okina.univ-angers.fr/teodor.tiplica/publications>
- [3] <http://okina.univ-angers.fr/a.kobi/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[keyword\]=6252](http://okina.univ-angers.fr/publications?f[keyword]=6252)
- [5] [http://okina.univ-angers.fr/publications?f\[keyword\]=6207](http://okina.univ-angers.fr/publications?f[keyword]=6207)
- [6] [http://okina.univ-angers.fr/publications?f\[keyword\]=6667](http://okina.univ-angers.fr/publications?f[keyword]=6667)
- [7] [http://okina.univ-angers.fr/publications?f\[keyword\]=6255](http://okina.univ-angers.fr/publications?f[keyword]=6255)
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=6668](http://okina.univ-angers.fr/publications?f[keyword]=6668)
- [9] [http://okina.univ-angers.fr/publications?f\[keyword\]=6669](http://okina.univ-angers.fr/publications?f[keyword]=6669)
- [10] [http://okina.univ-angers.fr/publications?f\[keyword\]=6670](http://okina.univ-angers.fr/publications?f[keyword]=6670)
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=6671](http://okina.univ-angers.fr/publications?f[keyword]=6671)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=6672](http://okina.univ-angers.fr/publications?f[keyword]=6672)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=6673](http://okina.univ-angers.fr/publications?f[keyword]=6673)
- [14] [http://okina.univ-angers.fr/publications?f\[keyword\]=6674](http://okina.univ-angers.fr/publications?f[keyword]=6674)
- [15] [http://okina.univ-angers.fr/publications?f\[keyword\]=6675](http://okina.univ-angers.fr/publications?f[keyword]=6675)
- [16] [http://okina.univ-angers.fr/publications?f\[keyword\]=6676](http://okina.univ-angers.fr/publications?f[keyword]=6676)
- [17] [http://okina.univ-angers.fr/publications?f\[keyword\]=4227](http://okina.univ-angers.fr/publications?f[keyword]=4227)
- [18] [http://okina.univ-angers.fr/publications?f\[keyword\]=6677](http://okina.univ-angers.fr/publications?f[keyword]=6677)
- [19] [http://okina.univ-angers.fr/publications?f\[keyword\]=6678](http://okina.univ-angers.fr/publications?f[keyword]=6678)
- [20] [http://okina.univ-angers.fr/publications?f\[keyword\]=6679](http://okina.univ-angers.fr/publications?f[keyword]=6679)
- [21] [http://okina.univ-angers.fr/publications?f\[keyword\]=6680](http://okina.univ-angers.fr/publications?f[keyword]=6680)
- [22] <http://okina.univ-angers.fr/publications/ua1689>
- [23] <http://dx.doi.org/10.1109/MED.2008.4602050>

Publié sur *Okina* (<http://okina.univ-angers.fr>)