



## FDI in Multivariate Process with Naive Bayesian Network in the Space of Discriminant Factors

Submitted by Sylvain Verron on Mon, 06/13/2016 - 12:55

Titre	FDI in Multivariate Process with Naive Bayesian Network in the Space of Discriminant Factors
Type de publication	Communication
Type	Communication avec actes dans un congrès
Année	2006
Langue	Anglais
Date du colloque	28/11-01/12 2006
Titre du colloque	International Conference on Computational Intelligence for Modelling Control and Automation and International Conference on Intelligent Agents Web Technologies and International Commerce (CIMCA'06)
Titre des actes ou de la revue	Proceedings of CIMCA 2006, International Conference on Computational Intelligence for Modelling, Control and Automation jointly with IAWTIC 2006, International Conference on Intelligent Agents, Web Technologies and International Commerce
Pagination	216
Auteur	Tiplica, Téodor [1], Verron, Sylvain [2], Kobi, Abdessamad [3], Nastac, Iulian [4]
Pays	Australie
Editeur	IEEE
Ville	Sydney
ISBN	0-7695-2731-0
Mots-clés	Artificial Intelligence [5], Bayes methods [6], Bayesian methods [7], Classification algorithms [8], classification method [9], data mining [10], discriminant factor [11], Electronic mail [12], Error analysis [13], fault detection [14], fault detection-and-isolation [15], Laboratories [16], Manufacturing processes [17], multivariate process [18], naive Bayesian network [19], pattern classification [20], performance analysis [21]
Résumé en anglais	The Naive Bayesian Network (NBN) classifier is an optimal classifier (in the sense of minimal classification error rate) in the case of independent descriptors or variables. The presence of dependencies between variables generally reduce his efficiency. In this article, we are proposing a new classification method named Naive Bayesian Network in the Space of Discriminants Factors (NBNSDF) which is based on the use of the NBN in the space of discriminants factors issue from a discriminant analysis. The discriminants factors are not correlated letting very efficient the use of the NBN. We found on simulated data that the NBNSDF method better detects and isolates faults in multivariate processes than the NBN in the case of strongly correlated variables.
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua14718">http://okina.univ-angers.fr/publications/ua14718</a> [22]
DOI	10.1109/CIMCA.2006.97 [23]

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