## Accepted Manuscript

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 PII:
 S0925-2312(17)30440-X

 DOI:
 10.1016/j.neucom.2016.11.076

 Reference:
 NEUCOM 18190



To appear in: *Neurocomputing* 

Received date:	15 May 2016
Revised date:	13 October 2016
Accepted date:	1 November 2016

Please cite this article as: Rongyao Hu, Jie Cao, Debo Cheng, Wei He, Yonghua Zhu, Qing Xie, Guoqiu Wen, Self-representation Dimensionality Reduction for Multi-model classification, *Neurocomputing* (2017), doi: 10.1016/j.neucom.2016.11.076

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## Self-representation Dimensionality Reduction for Multi-model classification

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## Abstract

Feature selection remove the noisy/irrelevant samples and select the subset of representative features, in general, from the high-dimensional space of data has been a fatal significant technique in computer vision and machine learning. Afterwards, motivated by the interpretable ability of feature selection patterns, beside, and the successful use of low-rank constraint in static and sparse learning in the field of machine learning. We present a novel feature selection model with unsupervised learning by using low-rank regression on loss function, and a sparsity term plus K-means clustering method on regularization term during this article. In order to distinguish from those existing state-of-the-art attribute selection measures, the propose method have described as follows: 1) represent the every feature by other features (including itself) via utilize the corresponding loss function with a feature-level self-express way; 2) embed K-means to generate pseudo class label information for the attribute selection as an pseudo supervised method, because of

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Preprint submitted to Neurocomputing

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