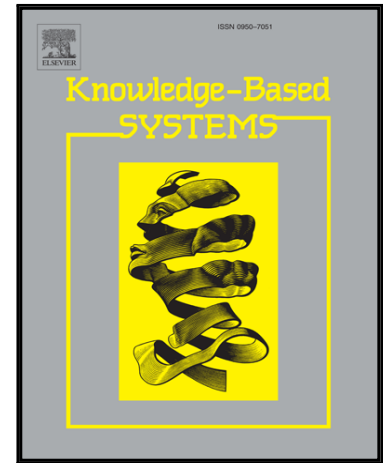


## Accepted Manuscript

Multi-label learning with label-specific features by resolving label correlations

Jia Zhang, Candong Li, Donglin Cao, Yaojin Lin, Songzhi Su, Liang Dai, Shaozi Li

PII: S0950-7051(18)30347-2  
DOI: [10.1016/j.knosys.2018.07.003](https://doi.org/10.1016/j.knosys.2018.07.003)  
Reference: KNOSYS 4377



To appear in: *Knowledge-Based Systems*

Received date: 5 September 2017  
Revised date: 30 June 2018  
Accepted date: 3 July 2018

Please cite this article as: Jia Zhang, Candong Li, Donglin Cao, Yaojin Lin, Songzhi Su, Liang Dai, Shaozi Li, Multi-label learning with label-specific features by resolving label correlations, *Knowledge-Based Systems* (2018), doi: [10.1016/j.knosys.2018.07.003](https://doi.org/10.1016/j.knosys.2018.07.003)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- We propose to learn label-specific features using sparsity regularized optimization in multi-label setting, which cover the information of label correlations.
- We model this multi-label learning problem by an optimization framework in which the weights of features and label correlations-based features are defined as two sets of unknown variables, and introduce an iterative optimization method to update these unknown variables.
- Label correlations are represented by additional features generated in the optimization process, and a KNN-like method is designed to obtain label correlations-based features of test data.
- Extensive experiments demonstrate the advantages of our proposed algorithm. In addition, two real-world data sets on TCM are collected, and our proposed algorithm is further validated on these two data sets in terms of the identification of health-state in TCM.

Download English Version:

<https://daneshyari.com/en/article/10151069>

Download Persian Version:

<https://daneshyari.com/article/10151069>

[Daneshyari.com](https://daneshyari.com)