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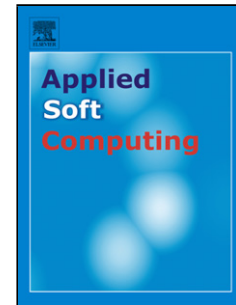Please cite this article as: Salabat Khan, Abdul Rauf Baig, Ant Colony Optimization based Hierarchical Multi-label Classification Algorithm, Applied Soft Computing Journal http://dx.doi.org/10.1016/j.asoc.2017.02.021

Ant Colony Optimization based Hierarchical Multi-label Classification Algorithm

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Graphical abstract

An example search space of hmAntMiner-C for constructing rule antecedent

Highlights

- This paper presents a hierarchical multi-label classification algorithm (hmAntMiner-C)
- It uses correlation of attribute-value pairs for constructing IF-THEN rule list
- Comparison is provided with some other state of the art algorithms with promising results

Abstract. There exist numerous state of the art classification algorithms that are designed to handle the data with nominal or binary class labels, where a sample belongs to only a single class label. In these problems, known as flat classification problems, class labels are independent of each other. Unfortunately, on the other hand, less attention is given to the genre of classification problems where samples may belong to several classes and at the same time the class labels are