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## **Editorial**

This issue presents three papers on the very hot topic of image mining. This kind of information may be represented in different ways each requiring different methods of image mining.

In this issue, three different methods for image mining are presented for three different types of applications.

The first paper deals with similarity retrieval over a graph-based data base. The image content is represented by attributed graphs. The attributes may be numerical and symbolical attributes. This paper explains how similarity is assessed for such a representation with mixed attributes and relations and also elucidates the graph-based retrieval mechanism.

The second paper describes the method of knowledge acquisition for image-based content based on lung nodule diagnosis. It explains how to deal with image-content when no explicit knowledge and visual language is available from scratch and how to set up a common visual vocabulary as well as general rules for interpretation. Image-mining based on decision trees can be helpful for this task. The methodology and the achieved results are explained in detail in this paper.

The third paper publishes studies on the usefulness of prototype-based classification for medical tasks where only unequally distributed data sets are available. The important features of such a classifier are studied and evaluated for different data sets. Finally, new research directions for such classifiers are given.

Petra Pernert  
Editor