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Editorial

The present journal issue contains three papers on very important multimedia data mining applications.

The first one by Huang and Haralick is concerned with the recognition of text pattern by a new graphical model. It is probabilistic in nature and based on CRFs, HMMS, and MEMMS but takes into account the special aspects of the application. It is a new step into the direction of recognizing documents concerned with a certain topic that are available online or arrive in temporal sequence. The method will be a break through in summarizing the heavy content that is created for one topic all over the world.

The second paper by Lunga and Ersoy deals with remote sensing images. These images contain a lot of low-level image features that are hardly to transform into higher-level features. Because of that it is highly likely that they may run into the course of dimensionality problem. They show for the particular application that feature reduction can be done by transforming the features into another space that preserves the spacial relation of the pixel. The paper is a new valuable paper of the specific topic “feature transformation” of the MLDM and ICDM data mining community. Special similarity measures are proposed for classification. It shows once more that the application of the nearest neighbor rule and case-based reasoning can lead to superior performance of a system.

The third paper by Attig and Perner deals with feature description and classification for medical applications in particular colon image classification. Texture seems to be a good descriptor for describing the appearance of different objects in medical images without going into more detailed low-level feature descriptions. However the texture descriptor should be able to model the different appearances of the objects very fine grained and in a flexible way. The work evaluates the texture features derived from the co-occurrence matrix and the texture features based on Random Sets. It shows that Random Sets are a flexible method to model different 2-D textures in medical images in efficient way.

Petra Perner
Editor