Abstract

This system proposes an ontology based framework for the semantic search in the image annotation process. The main objective of this approach is to use ontology for the semantic search in the image retrieval process. The ontology based framework is developed to define the image space. This system proposes a construction of semantic based approach for image representation using SVM and decision tree classifiers for learning and retrieval of relevant images. So the performance is significantly enhanced by using the SVM and decision tree as a classifier for retrieving the similar images.

References

- Carneiro, G., Chan, A. B., Moreno, P. J., Vasconcelos, N., "Supervised learning..."
- Dmitri V. Kalashnikov, Sharad Mehrotra, Jie Xu, and Nalini Venkatasubramanian; "A Semantics-Based Approach for Speech Annotation of Images"; IEEE transactions on knowledge and data engineering, 2011 Vol. 23, No. 9, September 2011, pp. 1373-1387.
- Ruhan He, Naixue Xiong, Laurence T. Yang and Jong Hyuk Park; (2011); Using Multi-Modal Semantic Association Rules to fuse keywords and visual features automatically for Web image retrieval; Elsevier science, Information Fusion Vol. 12, pp. 223-230.

Index Terms

Computer Science

Image Processing
Keywords

Automatic image annotation  support vector machine  Decision Tree learner
ontology based retrieval

Content Based Image Retrieval