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 Venkatashubramanian, &quot;A Semantics-Based Approach for Speech Annotation of Images&quot;; IEEE transactions on knowledge and data engineering, 2011 Vol. 23, No. 9, September 2011, pp. 1373-1387.
- Han, Y. , Qi, X. ,&quot;A complementary SVMs-based image annotation system&quot;; In: Proceedings of the International Conference on Image Processing (ICIP'05), Genoa, Italy, pp. 1185–1188 2005.

Index Terms

Computer Science Image Processing
Keywords
Automatic image annotation support vector machine Decision Tree learner
ontology based retrieval
Content Based Image Retrieval