

{tag}

{/tag}

International Journal of Computer Applications
© 2011 by IJCA Journal

Volume 33 - Number 2

Year of Publication: 2011

Authors:

S.R.Surya

G.Sasikala

10.5120/3992-5647

{bibtex}pxc3875647.bib{/bibtex}

Abstract

An image retrieval based on content has been a very effective research area, with various techniques developed by various researchers. Developing those techniques needs proficiency

in various areas of information technology: databases and indexing structures, system design and integration, graphical user interfaces (GUI), signal processing and analysis, man-machine interaction, user psychology, etc. This paper focuses on using Spatial Feature of Texture primitive and edge detection by using contribution based clustering algorithm and its efficiency is measured by comparing it with color feature. Experimental results show that the proposed method has increased the cost of precision of image retrieval.

Reference

- Harikrishna Narasimhan and Purushothaman Ramraj] "Contribution-Based Clustering Algorithm for Content-Based Image Retrieval" 2010 5th International Conference on Industrial and Information Systems, ICIIS 2010, Jul 29 - Aug 01, 2010, India.
- P.Sankara Rao.et. al. "An approach for cbir system Through multi layer neural Network" International Journal of Engineering Science and Technology Vol. 2(4), 2010, 559-563.
- Tapas Kanungo, David M. Mount, Nathan S.Netanyahu, Christine D. Piatko, Ruth Silverman, and Angela Y. Wu, "An Efficient k-Means Clustering Algorithm: Analysis and Implementation", IEEE transactions on pattern analysis and machine intelligence, vol. 24, no. 7, July 2002.
- Chang Wen Chen, Jiebo Luo and Kevin J. Parker, "Image Segmentation via Adaptive K-Mean Clustering and Knowledge-Based Morphological Operations with Biomedical Applications", IEEE transactions on image processing, vol. 7, no. 12, December 1998.
- Weiling Cai, Songcan Chen, Daoqiang Zhang, "Fast and robust fuzzy c-means clustering algorithms" incorporating local information for image segmentation", ISSN:0031-3203.
- Ritu Shrivastava, Khushbu Upadhyay, Raman Bhati "Comparison between K-Mean and C-Mean Clustering for CBIR", Second International Conference on Computational Intelligence, Modelling and Simulation, 2010 IEEE.
- P.Sankara Rao ,E.Vamsidhar.et.al "An approach for cbir system through multi layer neural network" International Journal of Engineering Science and Technology Vol. 2(4), 2010, 559-563.
- P. S. Hiremath and Jagadeesh Pujari" Content Based Image Retrieval based on Color, Texture and Shape features using Image and its complement" International Journal of Computer Science and Security, Volume (1): Issue (4)
- R. Xu and D. Wunsch, "Survey of clustering algorithms," IEEE Transactions on Neural Networks, Vol.16, Issue 3, pp. 645– 678, May 2005.
- "Object and concept recognition for content-based Image retrieval,"
- Online. Available: <http://www.cs.washington.edu/research/imagedatabase/groundtruth/>.
- Zhang Ji, Hsu, Mong and Lee, "Image Mining: Issues, Frameworks and Techniques," Proceedings of the Second International Workshop on Multimedia Data Mining (MDM/KDD'2001), in conjunction with ACM SIGKDD conference, San Francisco, USA, August 26, 2001
- C. Ordonez and E. Omiecinski, "Discovering association rules based on image content," Proceedings of the IEEE Advances in Digital Libraries Conference (ADL'99), 1999.
- Sanjay T. Gandhe, K. T. Talele and Avinash G. Keskar, "Image Mining Using Wavelet Transform," Knowledge-Based Intelligent Information and Engineering Systems, Springer link

book chapter, pp. 797-803, 2007.

- Haralick R; “ Statistical and structural approaches to texture”, Proceedings of IEEE, 1979, 67(5), pp. 786-804.
- A. K. Jain and A. Vailaya. Image retrieval using color and shape. Pattern Recognition, 29(8):1233–1244, 1996.
- Selim Aksoy and R. Gokberk Cinbis, “Image Mining Using Directional Spatial Constraints,” IEEE Geoscience and Remote Sensing Letters, vol. 7, no. 1, pp. 33-37, 2009.

Index Terms

Computer Science

Image Processing

Key words

Texture primitive
clustering algorithm

Edge detection

Contribution based

