{tag}   {/tag}

IJCA Proceedings on International Conference and workshop on Emerging Trends in Technology (ICWET 2012)

icwet2012 - Number 1

Year of Publication: 2012

Authors:

Jayavrinda Vrindavanam

Saravanan Chandran

Gautam K. Mahanti

{bibtex}icwet1004.bib{/bibtex}

Abstract

The research in the field of image compression is driven by the ever increasing bandwidth requirements for transmission of images in computer, mobile and internet environments. In this context, the survey summarizes the major image compression methods spanning across lossy and lossless image compression techniques and explains how the JPEG and JPEG2000 image compression techniques are distinct from each other. Further, the paper concludes that still

research possibilities exist in this field to explore efficient image compression.

References

-     Stephen A. Martucci and Iraj Sodagar, 1996. Zerotree   Entropy Coding of Wavelet Coefficients For Very Low Bit Rate Vide, IEEE, PP 533-536.
-     Woods, R. C. 2008. Digital Image processing. New Delhi: Pearson Pentice Hall, Third Edition, Low price edition, Pages 1-904.
-     Sonja Grgic, M. M. 2001. Comparison of JPEG Image Coders.; Proceedings of the 3rd International symposium on Video Processing and Multimedia Communications, June, (pp. 79-85). Zadar, Croatia.
-     Austin, D. 2011. Image Compression: Seeing wht's not there,. Feature Column, American Mathematical Society. May .
-     Wang, E.-h. Y. 2009. Joint Optimisation Run-Length Coding, Huffman Coding, and Quantization Table with Complete Baseline JPEG Decoder Compatibility. IEEE Transactions on Image Processing , Volume No. 18, No.1, January.
-     Ram Singh, R. V. (undated), JPEG 2000: Wavelet Based Image Compression. IIT, Mumbai: EE678 Wavelet Application Assignment 1.
-     Athanassios Skodras, C. C. 2001. The JPEG 2000 Still Image Compression Standard. IEEE Signal Processing Magazine, September .
-     Florian, B. 2001. Wavelet in real time digital audio processing: Analysis and sample implementations. Dept. of Computer Science, Master's thesis, University of Mannheim.
-     Bomers, F. 2000. Wavelets in real time digital audio processing: Analysis and sample implementations. University of Manheim, Dept. of Computer Science IV, Master's thesis.
-     Strang, G., & Nguyen, T. 1996. Wavelets and filter   banks. Wellesley: Cambridge Press.
-     Jawerth, B., & Sweldens, W. 1994. http://cm.bell-labs.com/who/wim/papers/papers.html.Retrieved 2011, from Bell Labs: http://cm.bell-labs.com.

-      Graps, A. 1995. An introduction to wavelets. Retrieved   2011, from http://www.amara.com/current/wavelet.html, 1995: www.amara.com .
-     Embree, P. M. 1995. C-Algorithms for Real-Time DSP.   Prentice Hall PTR.
-      S Grgic, K. K. 1999. Image Compression using   Wavelets. IEEE International Symposium on Industrial Electronics, ISIE'99, Bled, Solvania .
-     Cruz, Y. L. 2006. A Fast and Efficient Hybrid Fractal - Wavelet Image Coder. IEEE Transactions on Image Processing , Vol 15, No.1, January.
-     Cross, D. 1998. http://www.intersrv.com/dcros /timefilt. html.   Retrieved 2005, from http://www.intersrv.com.
-     Blu, M. U. 2003. Mathematical Properties of the JPEG - 2000 Wavelet filters. IEEE , Vol.12, No.9, September.
-     De Poli, G., Piccialli, A., & Roads, C. 1991. Representation of musical signals. In Representation of musical signals. MIT Press.
-     Eugenia Al Politou, G. P. 2004. JPEG 2000 and Dissemination of Cultural Heritage over the Internet. IEEE Transactions on Image Processing , Vol. 13, No. 3, March.

- Gobbers, P. V.-F. 2002. Directional Dhyadic Wavelet Transforms: Design and Algorithms. IEEE Transactions on Image Processing , Vol. 11, No 4, April.
- Sonal, D. K. 2007. A study of various image compression techniques. COIT, RIMT-IET. Hisar.
- Tinku Acharya, P.-S. T. 2005. JPEG 2000 Standard for Image Compression: Concepts, Algorithms and VLSI Architecture. Wiley, Hoboken.
- Vetterli, M., & Kovacevic, J. 1995. Wavelets and Subband coding. Prentice Hall, PTR.

Index Terms

Computer Science   Emerging Trends in Technology

Keywords

JPEG   JPEG2000   wavelet   image compression