

A method for improving the error diffusion algorithms

OVIDIU COSMA

ABSTRACT.

In this paper, a method for compensating the softening effect of the error diffusion algorithms, and a new dithering technique that emphasizes the details of images and is based entirely on the wavelet transform, are presented

REFERENCES

- [1] Cosma, O., *Wavelet transform application in image compression*, Bul. Științ. Univ. Baia Mare Ser. B, Vol. XVI (2000), No. 2, pp. 283-296
- [2] Daubechies, I., *Ten lectures on Wavelets*, SIAM Publ., Philadelphia, pp. 195-202,(1992)
- [3] Floyd, R. and Steinberg, L., *An adaptive algorithm for spatial Grey-Scale*, Proc. of the SID, Vol. 17, No. 2, pp. 75-77, (1976)
- [4] Reissell, L. M., *Multiresolution and Wavelets*, SIGGRAPH'95 Course Notes, pp. 37-69 (1995)
- [5] Veryovka, O. and Buchanan, J. W., *Texture-Based Dither Matrices*, Computer Graphics Forum 19:1, pp. 51-64 (2000)
- [6] Signal and Image Processing Group, University of Bath, *The Bath Wavelet Warehouse*,
<http://www.bath.ac.uk/elec-eng/research/sipg/resource/warehouse.htm>
- [7] A Bank of Wavelet Filters,
<http://www.isye.gatech.edu/~brani/.public.html/Wiley/filters.html>
- [8] USC SIPI Image Database
<http://sipi.usc.edu/database/database.cgi?volume=misc&image=11#top>

NOTH UNIVERSITY OF BAI A MARE
DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE
VICTORIEI 76
430120 BAI A MARE, ROMANIA
E-mail address: cosma@mail.alphanet.ro