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Determination of the 3D border by repeated elimination of internal surfaces. (English)

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References:

- [1] Abel, D. J., Smith, J. L.: A data structure and algorithm based on a linear key for a rectangle retrieval problem. *Comptr. Graph. Image Proc.*24, 1–13 (1983). · [doi:10.1016/0734-189X\(83\)90017-8](#)
- [2] Artzy, E., Frieder, G., Herman, G. T.: The theory, design, implementation and evaluation of a three-dimensional surface detection algorithm. *Comptr. Graph. Image Proc.*15, 1–24 (1981). · [doi:10.1016/0146-664X\(81\)90103-9](#)
- [3] Dyer, C. R., Rosenfeld, A., Samet, H.: Region representation: boundary codes from quadtrees. *Comm. ACM*23, 171–179 (1980). · [Zbl 0429.68075](#) · [doi:10.1145/358826.358838](#)
- [4] Elcock, E. W.: Recursive triangulation. (Submitted.)
- [5] Gargantini, I., Tabakman, Z.: Linear quad- and oct-trees: their use in generating simple algorithms for image processing. *Proc. Graphics Interface '82, NCGA, Toronto*, 123–127 (1982).
- [6] Gargantini, I.: An effective way of storing quadtrees. *Comm. ACM*25, 905–910 (1982). · [Zbl 0504.68057](#) · [doi:10.1145/358728.358741](#)
- [7] Gargantini, I.: Linear octrees for fast processing of three-dimensional objects. *Comptr. Graph. Image Proc.*20, 365–374 (1982). · [doi:10.1016/0146-664X\(82\)90058-2](#)
- [8] Gargantini, I.: Translation, rotation and superposition of linear quadtrees. *Int. J. Man-Machine Studies*18, 253–263 (1983). · [Zbl 0507.68059](#) · [doi:10.1016/S0020-7373\(83\)80009-1](#)
- [9] Gargantini, I., Tabakman, Z.: Separation of connected components using linear quad- and octtrees. *Proc. Twelfth Conf. Num. Math. Comptr. 32, University of Manitoba, Winnipeg, Manitoba, Congressus Numeratum, Vol. 37*, 257–276 (1983). · [Zbl 0542.68073](#)
- [10] Gargantini, I.: The use of linear quadtrees in a numerical problem. *SIAM J. Num. Anal.*20, 1161–1169 (1983). · [Zbl 0532.65007](#) · [doi:10.1137/0720086](#)
- [11] Gargantini, I., Atkinson, H. H.: Linear quadtrees: a blocking technique for contour filling. *Pattern Recognition* (to appear). · [Zbl 0537.68095](#)
- [12] Gargantini, I., Lam, G.: An approximation to the 3D border. *Proc. Soc. Photo. Inst. Eng. SPIE. Geneva* (1983), 98–103 (1983).
- [13] Gargantini, I.: Triangulation of images. (Submitted.) · [Zbl 0182.21402](#)
- [14] Jackins, C. L., Tanimoto, S. L.: Octtrees and their use in representing three-dimensional objects. *Comptr. Graph. Image Proc.*14, 249–270 (1980). · [doi:10.1016/0146-664X\(80\)90055-6](#)
- [15] Kawaguchi, E., Endo, T.: A method for binary picture representation and its approximation to data compression. *IEEE Trans. Pattern Anal. Mach. Intell.*PAMI-2, 27–35 (1980). · [Zbl 0436.68062](#) · [doi:10.1109/TPAMI.1980.4766967](#)
- [16] Liu, H. K.: Two and three dimensional boundary detection. *Comptr. Graph. Image Proc.*6, 123–134 (1977). · [doi:10.1016/S0146-664X\(77\)80008-7](#)
- [17] Oliver, M. A., Wiseman, N. E.: Operations on quadtree encoded images. *Comptr. J.*26, 82–91 (1983). · [Zbl 0523.68056](#)
- [18] Pavlidis, T.: Algorithms for graphics and image processing. *Computer Press* 1982. · [Zbl 0482.68086](#)
- [19] Rosenfeld, A., Kak, A. C.: Digital picture processing, Vols. 1 and 2, 2nd ed. New York: Academic Press 1982. · [Zbl 0564.94002](#)
- [20] Srihari, S. N.: Representation of three-dimensional images. *ACM Computer Survey*1981, 399–424.
- [21] Udupa, K., Srihari, S. N., Herman, G. T.: Boundary detection in multidimensions. *IEEE Trans. Pattern Anal. Mach. Intell.*PAMI-4, 41–50 (1982). · [doi:10.1109/TPAMI.1982.4767193](#)

[22] Woodwark, J. R.: The explicit quad tree as a structure for Computer Graphics. *Comptr. J.*25, 235–238 (1982). · [doi:10.1093/comjnl/25.2.235](https://doi.org/10.1093/comjnl/25.2.235)

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