

A Method of Computing Fractal Dimension^{*}

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ABSTRACT

To describe the curves of the nature in computer vision system, curve interpolation is necessary. Fractal curve interpolation could create lots of complicated curves or surfaces. Fractal Dimension is also one of the important parameters for describing the scene's Fractal structures; it has been used in some field such as Computer Vision, Digital Image Processing. A method to compute Fractal Dimension is given in this paper.

Keywords: Box Dimension; Douglas-Peuker Algorithm;
Algorithm of random midpoint displacement.

^{*} This paper is supported by Fok Ying-tong Education Foundation.(91077)