[Bea1989b]

Segmentation of Range Images by Piecewise Approximation with Shape Constraints

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Abstract: Piecewise functional approximation of picture is shown to be a useful tool for the segmentation of range (3D) image. A hierarchical step-wise optimization algorithm is employed to transform the global optimization problem into one of sequential optimization. The step-wise criterion then corresponds to the increase of the approximation error produced by the merge of two segments. The segmentation results of range image of polyhedra are shown with the utilization of a planar approximation model. Constraints on segment contour length and segment shape is then added to improve the results.

“Segmentation of Range Images by Piecewise Approximation with Shape Constraints,”
Beaulieu Jean-Marie, Pierre Boulanger,
in *Computer Vision and Shape Recognition*, World Scientific Pub Co Inc, 1989, p. 87.
[Bibtex]

See also [Bea1988a].