An efficient algorithm for the computation of the metric average of two intersecting convex polygons, with application to morphing. (English) Zbl 1121.65022

An algorithm for computation of the metric average of 1D compact sets was introduced by R. Baier, N. Dyn and E. Farkhi [Approximation Theory X, Vanderbilt University Press, Nashville, 9–22 (2002; Zbl 1043.65034)]. The authors develop here an algorithm for the computation of the metric average between two intersecting convex polygons in 2D. A new non-intuitive approach to the morphing of 2D shapes, which does not require a search of corresponding parts, is suggested.

Reviewer: H. P. Dikshit (New Delhi)

MSC:
65D18 Numerical aspects of computer graphics, image analysis, and computational geometry

Keywords: convex polygons; metric average; morphing; linear time complexity

Full Text: DOI Link

References:

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