Reversed Sketch: A Scalable and Comparable Shape Representation

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PII: S0031-3203(18)30085-2
DOI: 10.1016/j.patcog.2018.03.001
Reference: PR 6478

To appear in: *Pattern Recognition*

Received date: 9 July 2016
Revised date: 4 December 2017
Accepted date: 3 March 2018

Please cite this article as: Ming Huang, JiaJun Lin, Ning Chen, Wei An, WeiJian Zhu, Reversed Sketch: A Scalable and Comparable Shape Representation, *Pattern Recognition* (2018), doi: 10.1016/j.patcog.2018.03.001

Highlights

- We proposed a polygonal shape representation which can simplify the shape features for better processing and comparison.
- We proposed a polygonal contour detection algorithm which can quickly extract contour from a binary or segment image.
- We proposed a comparable metric which can measure the similarity between polygons and the corresponding comparison algorithm. Made a great improvement on the existing metric, our metric and algorithm can be applied to concave or even spiral polygons.
- Our shape representation can be used to build hierarchical index on large image database for content-based image retrieval.