

5 Conclusion

In this paper, we proposed a segmentation algorithm using marching plane to cut exterior salient parts from 3D mesh. The proposed algorithm consists of several steps to extract prominent feature points, to find proper marching path, to extract cross section by intersecting marching plane with mesh along the marching path and to detect boundary by monitoring where a rapid variation has on the area of cross sections.

From the experimental results, we can see our algorithm could be invariant to pose, robust to noise and also competitive to the relative works with fixed parameters. In future we will focus on searching better marching path, on which we can extract multiple components to process hierarchical segmentation.

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