

Hex-mesh Re-parameterization from Aligned Base Domains

Supplemental material

Xifeng Gao, Zhigang Deng, and Guoning Chen
University of Houston

I. MORE RESULTS

Figures 1, 2, 3, 4, 5, and 6 provide additional alignment results of our method, compared to the original hex-meshes from [1], [2], [3], and [4], respectively. Their corresponding mesh statistics information is provided in Table 1 of the paper.

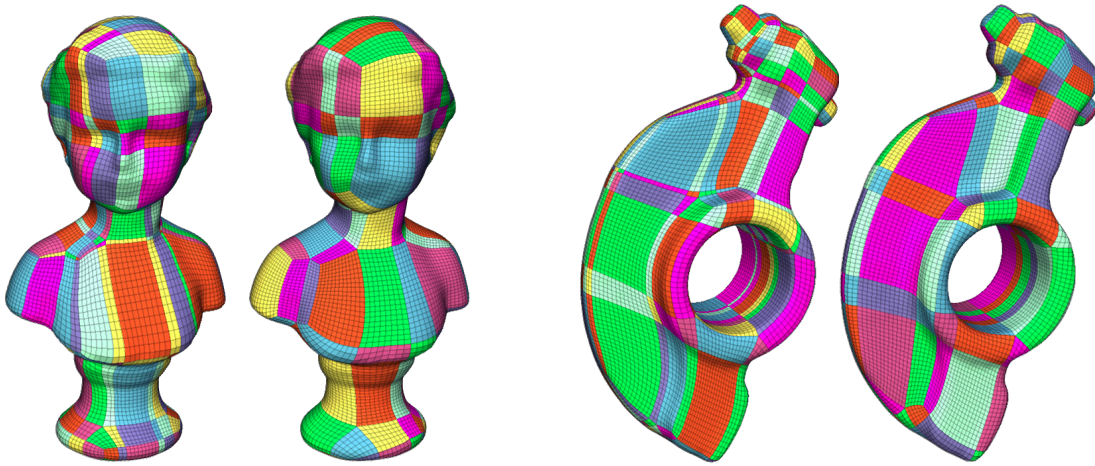


Fig. 1. Girl and Rockerarm hex-meshes before (the left of each model) and after (the right of each model) optimization with our method. Original hex-meshes are obtained from [1]. Corresponding statistics are in Table 1 of the paper.

REFERENCES

- [1] M. Livesu, N. Vining, A. Sheffer, J. Gregson, and R. Scateni, "Polycut: monotone graph-cuts for polycube base-complex construction," *ACM Trans. Graph.*, vol. 32, no. 6, p. 171, 2013.
- [2] J. Huang, T. Jiang, Z. Shi, Y. Tong, H. Bao, and M. Desbrun, "L1-based construction of polycube maps from complex shapes," *ACM Trans. Graph.*, vol. 33, no. 3, pp. 25:1–25:11, 2014.
- [3] J. Gregson, A. Sheffer, and E. Zhang, "All-hex mesh generation via volumetric polycube deformation," *CGF*, vol. 30, no. 5, pp. 1407–1416, 2011.
- [4] Y. Li, Y. Liu, W. Xu, W. Wang, and B. Guo, "All-hex meshing using singularity-restricted field," *ACM Trans. Graph.*, vol. 31, no. 6, pp. 177:1–177:11, Nov. 2012.

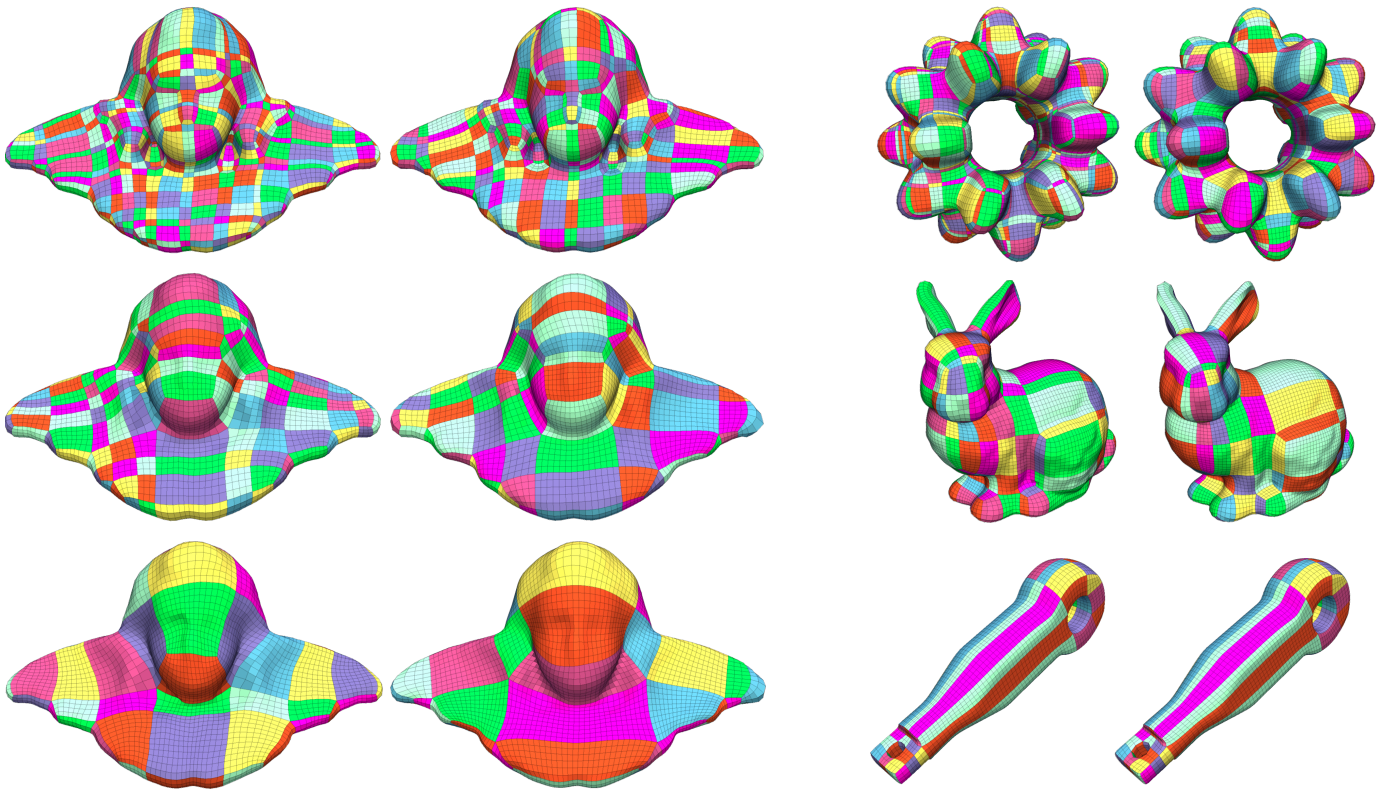


Fig. 2. Angel_1, Angel_2, Angel_3 (from top to bottom), Bumpy torus, Bunny, and Rod hex-meshes before (the left of each model) and after (the right of each model) optimization with our method. Original hex-meshes are obtained from [2]. Corresponding statistics are in Table 1 of the paper.



Fig. 3. Elephant, and Rockerarm-1 hex-meshes before (the left of each model) and after (the right of each model) optimization with our method. Original hex-meshes are obtained from [2]. Corresponding statistics are in Table 1 of the paper.

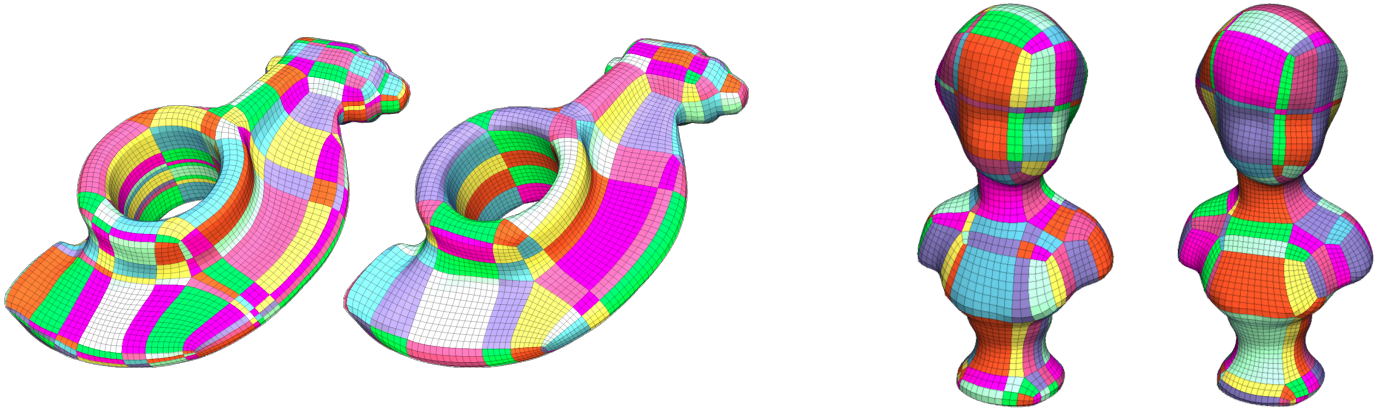


Fig. 4. Rockerarm-2 and Bustle hex-meshes before (the left of each model) and after (the right of each model) optimization with our method. Original hex-meshes are obtained from [2]. Corresponding statistics are in Table 1 of the paper.

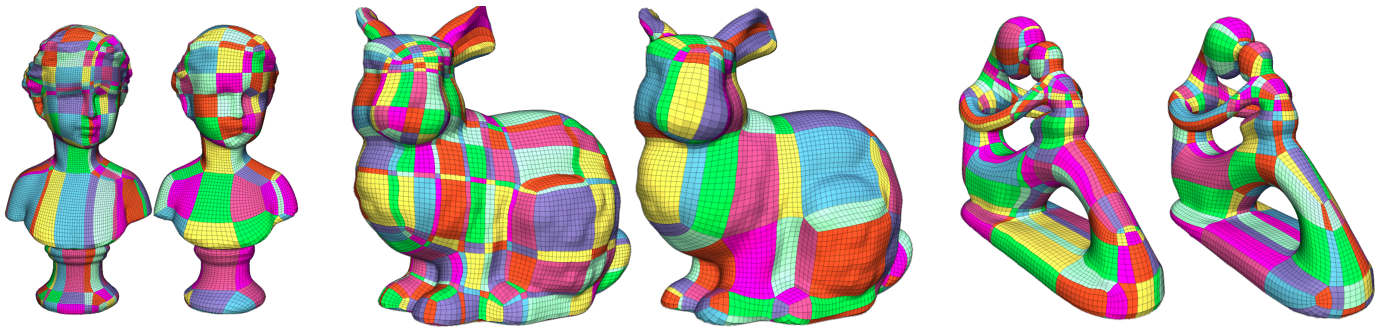


Fig. 5. Girl, Bunny, and Fertility hex-meshes before (the left of each model) and after (the right of each model) optimization through our method. Original hex-meshes are obtained from [3]. Corresponding statistics are in Table 1 of the paper.

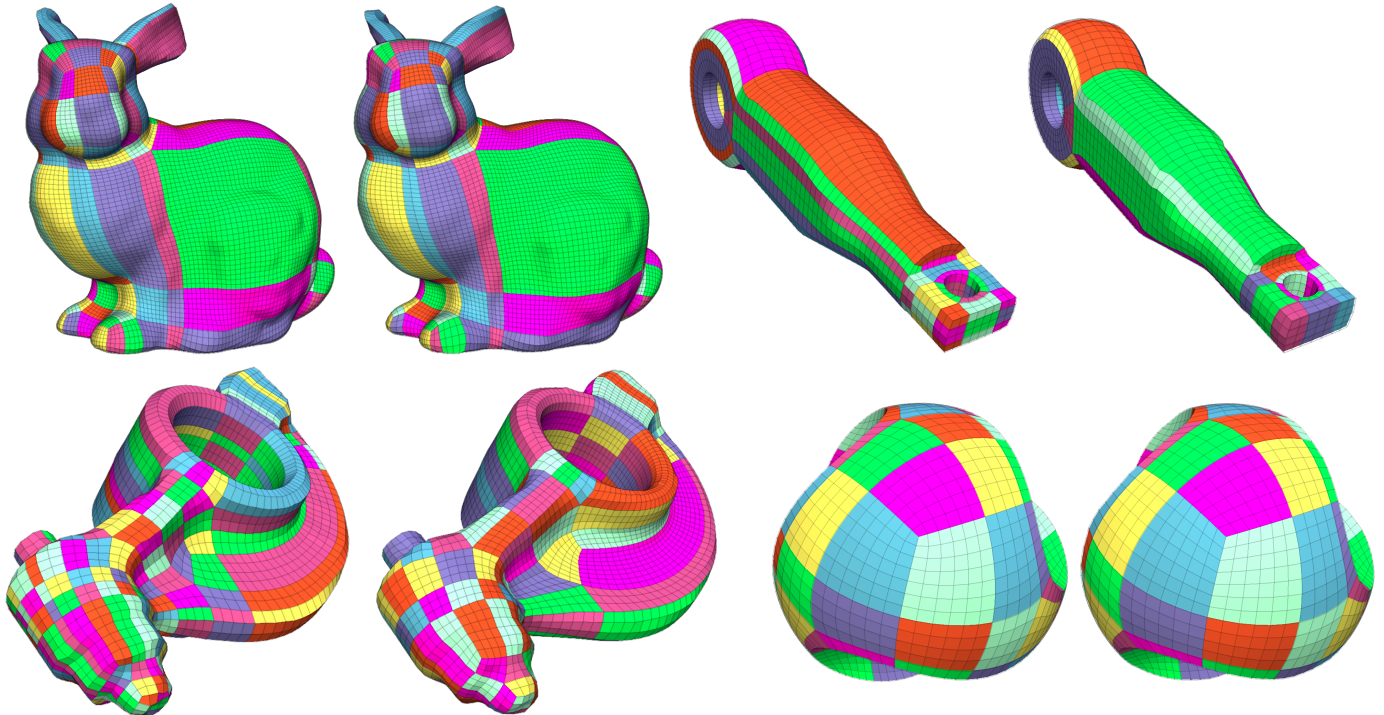


Fig. 6. Bunny, Rod, Rockerarm, and Sculpture-B hex-meshes before (the left of each model) and after (the right of each model) optimization through our method. Original hex-meshes are obtained from [4]. Corresponding statistics are in Table 1 of the paper.