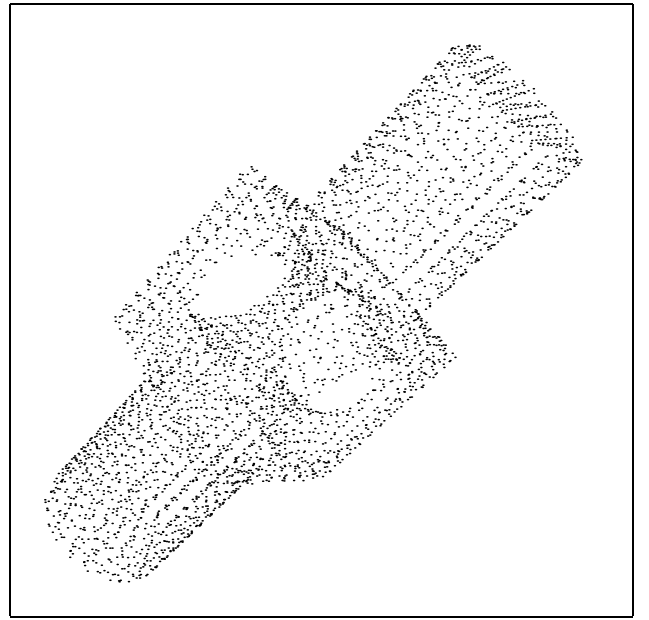
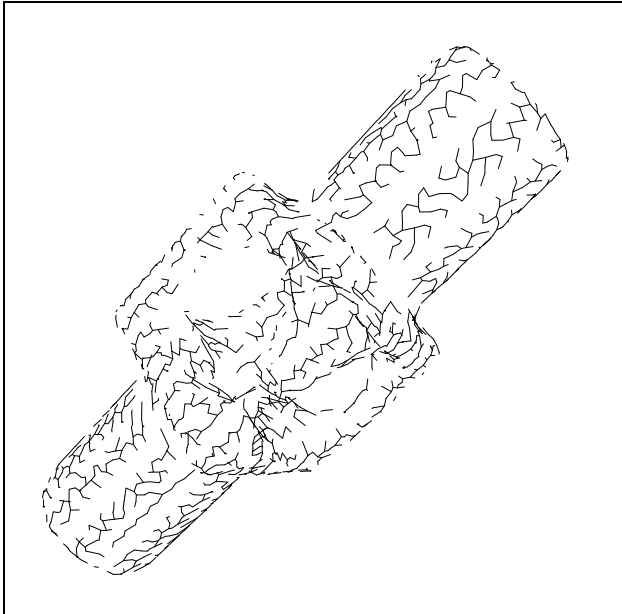


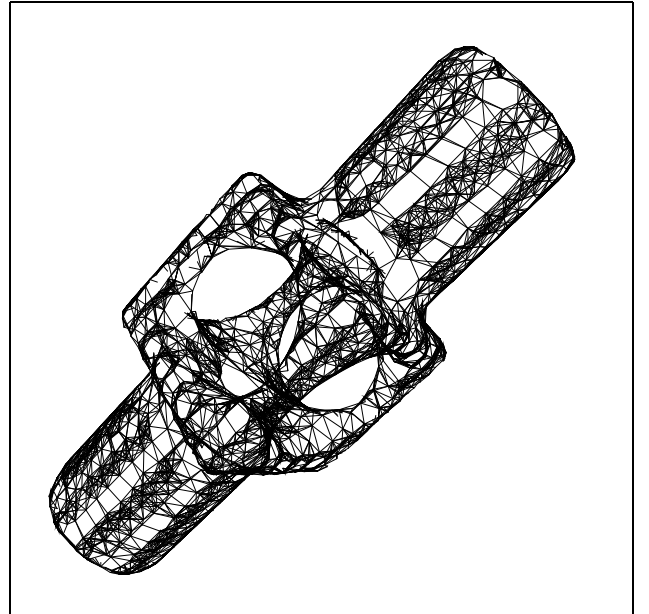
(a) Original CSG object



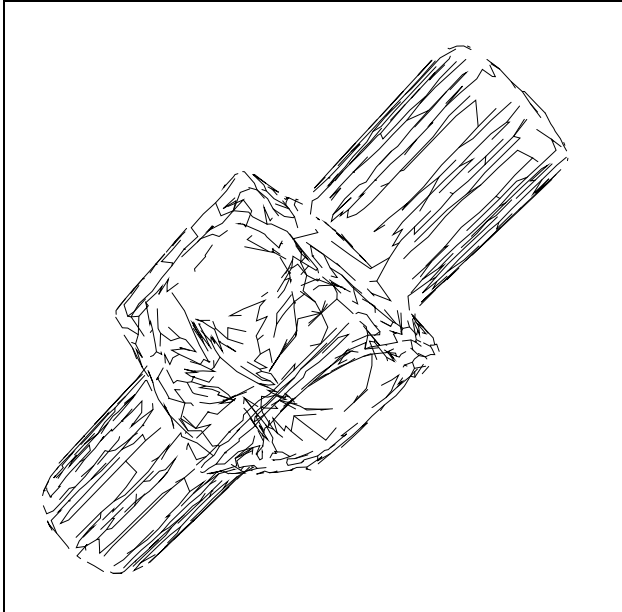
(b) Sampled points (\mathbf{x}_i) ($n = 4102$)



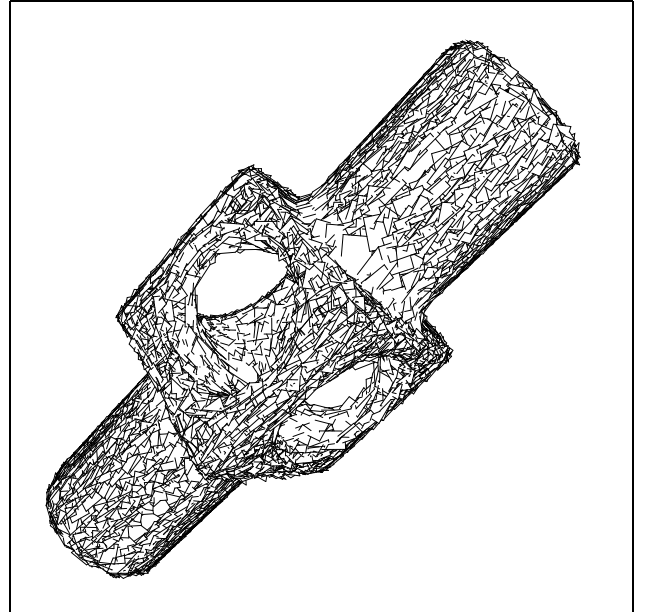
(c) EMST of tangent plane centers \mathbf{o}_i



(d) Riemannian Graph over \mathbf{o}_i

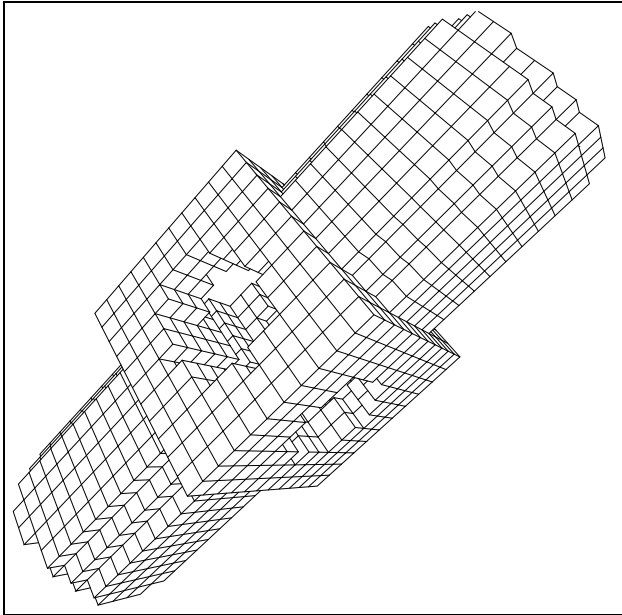


(e) Traversal order of orientation propagation

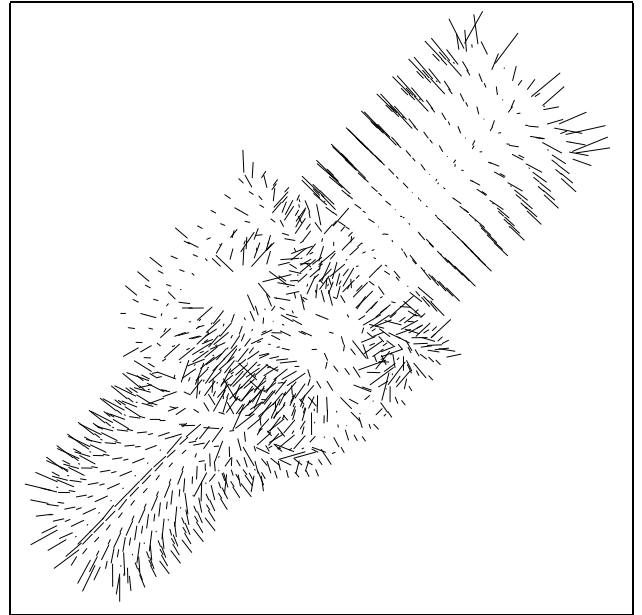


(f) Oriented tangent planes ($Tp(\mathbf{x}_i)$)

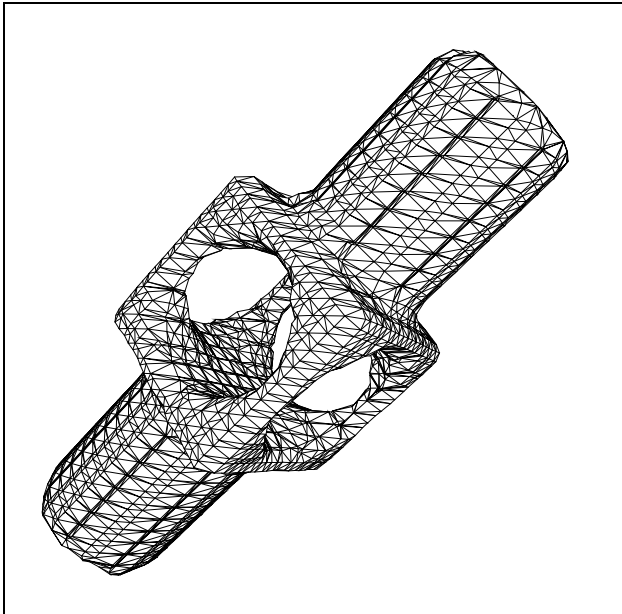
Figure 1: Reconstruction of ray-traced CSG object (simulated multi-view range data).



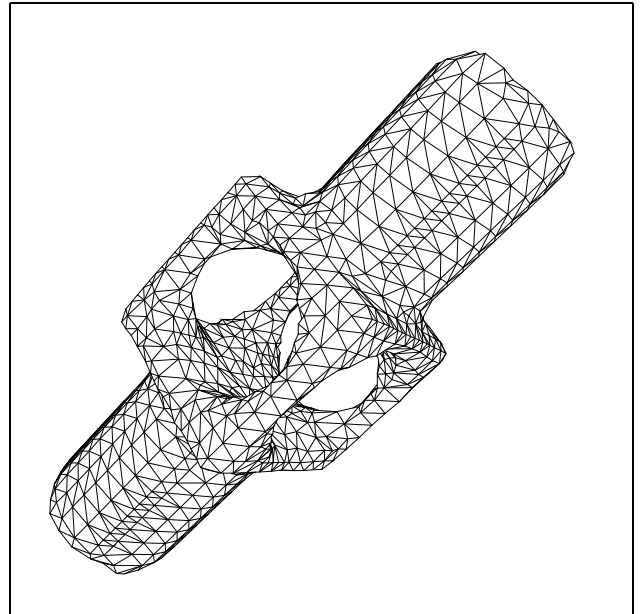
(a) Cubes visited during contouring



(b) Estimated signed distance (shown as $\mathbf{p} - \mathbf{z}$)

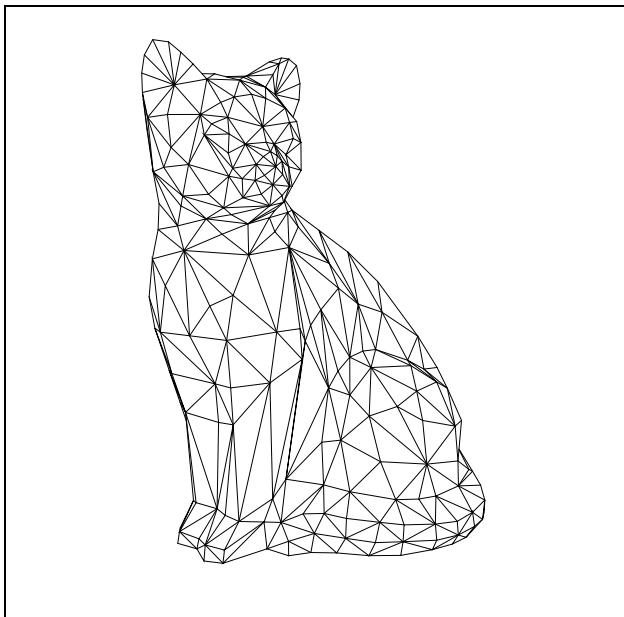


(c) Output of modified marching cubes

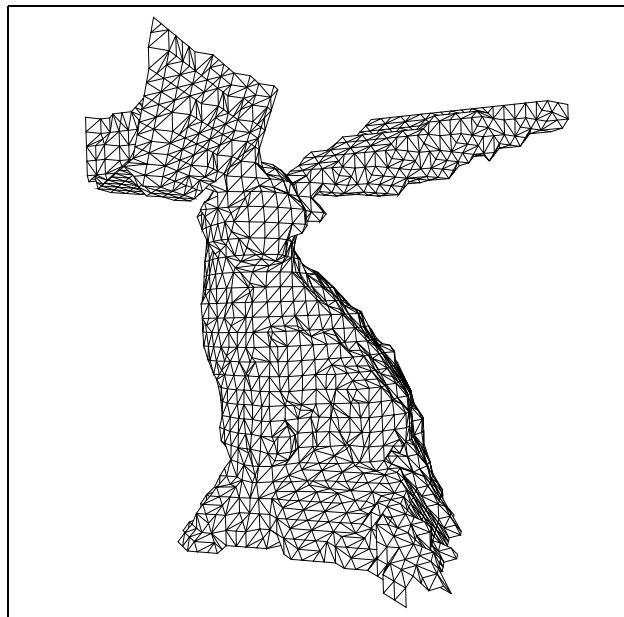


(d) Final surface after edge collapses

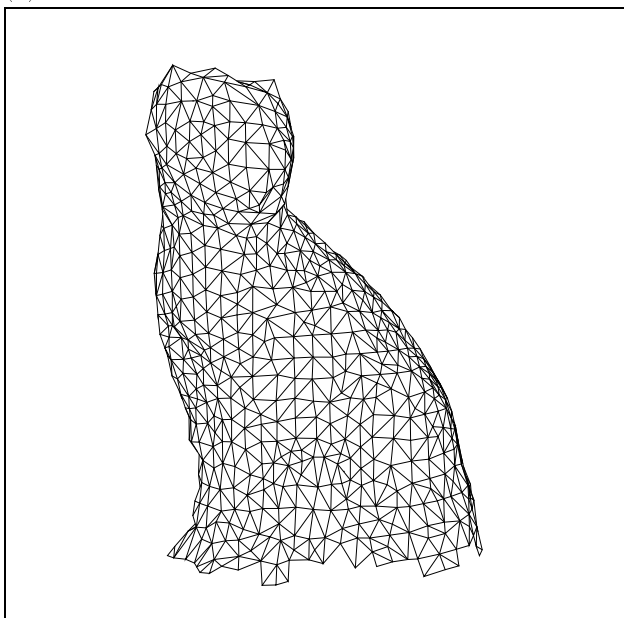
Figure 2: Reconstruction of CSG object (continued).



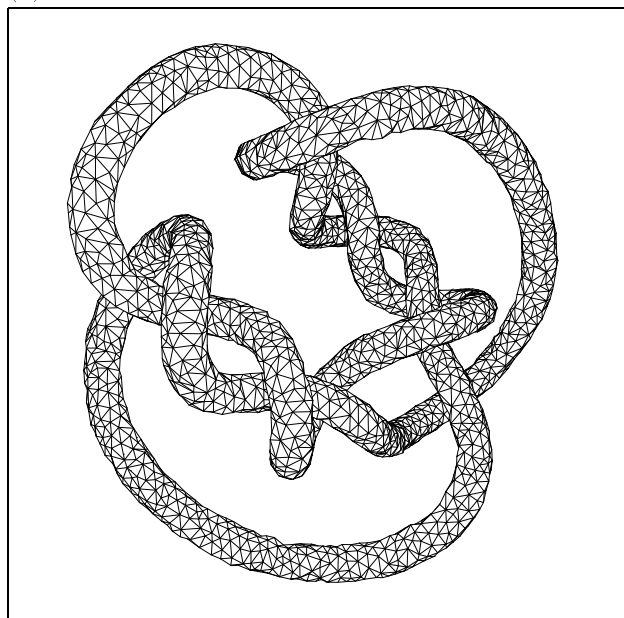
(a) Original mesh



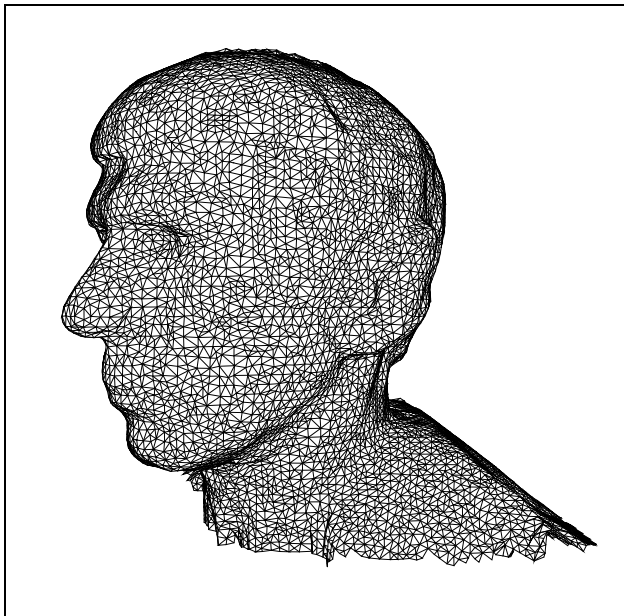
(b) Result of naive orientation propagation



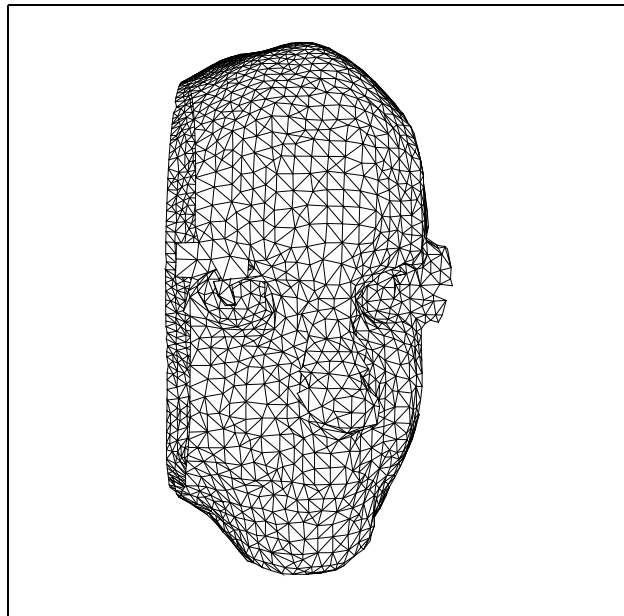
(c) Reconstructed bordered surface



(d) Reconstructed surface with complex geometry



(e) Reconstruction from cylindrical range data



(f) Reconstruction from contour data

Figure 3: Reconstruction examples.