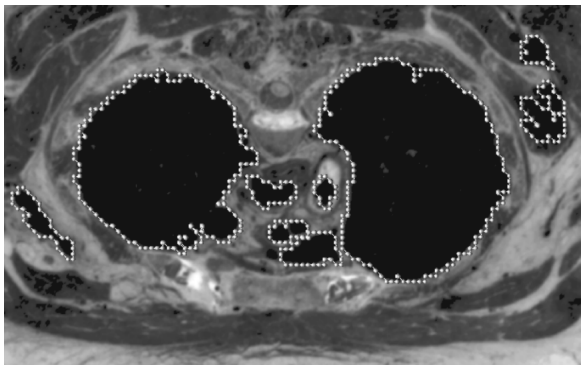


Figure 1. Isocontours for a medical image.

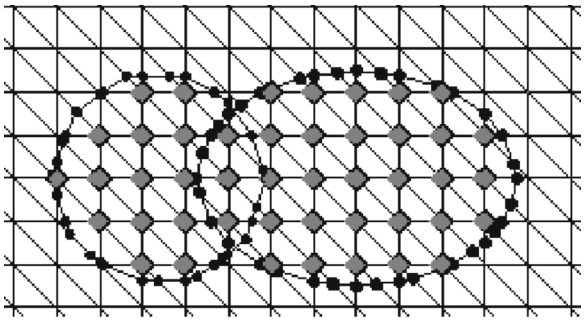


Figure 2. Two snakes colliding with the inside grid nodes and snaxels marked.

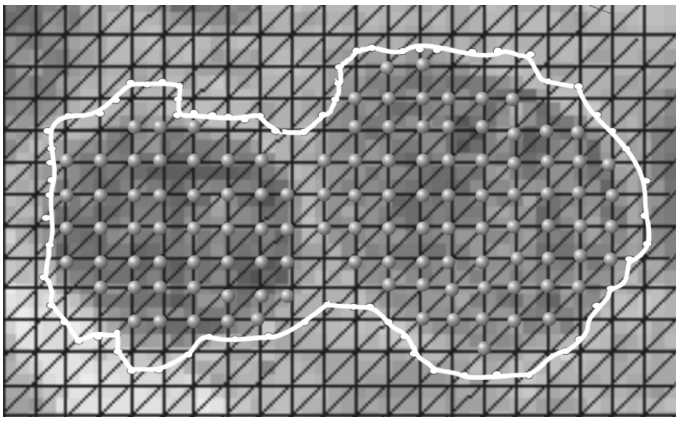
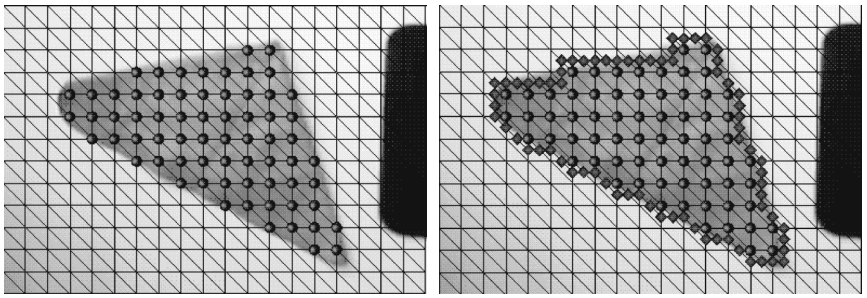


Figure 3. T-Snake (white curve) and the marked grid nodes (spheres).



(a) (b)

Figure 4. (a) Original image and Characteristic Function. (b) Boundary approximation.

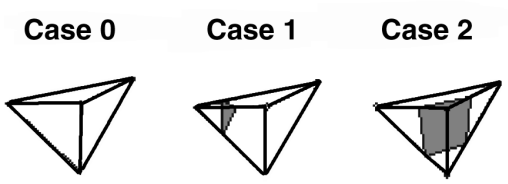


Figure 5. Basic types of intersections between a plane and a simplex in 3D.

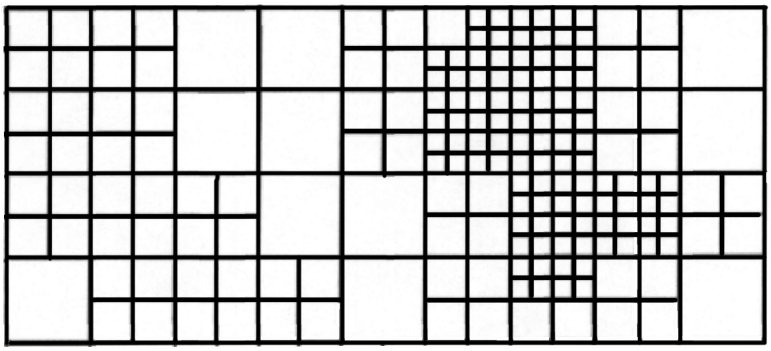
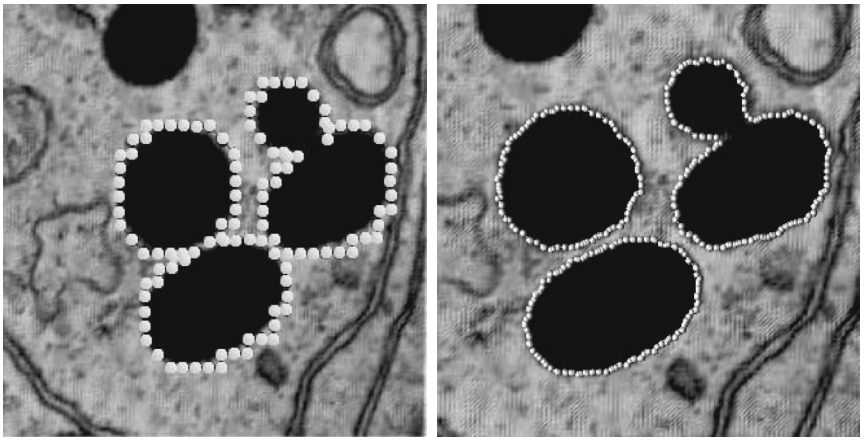


Figure 6. Representation of the multiresolution scheme.



(a) (b)

Figure 7. (a) PL manifolds for resolution 3×3. (b) Result with the highest (image) resolution.

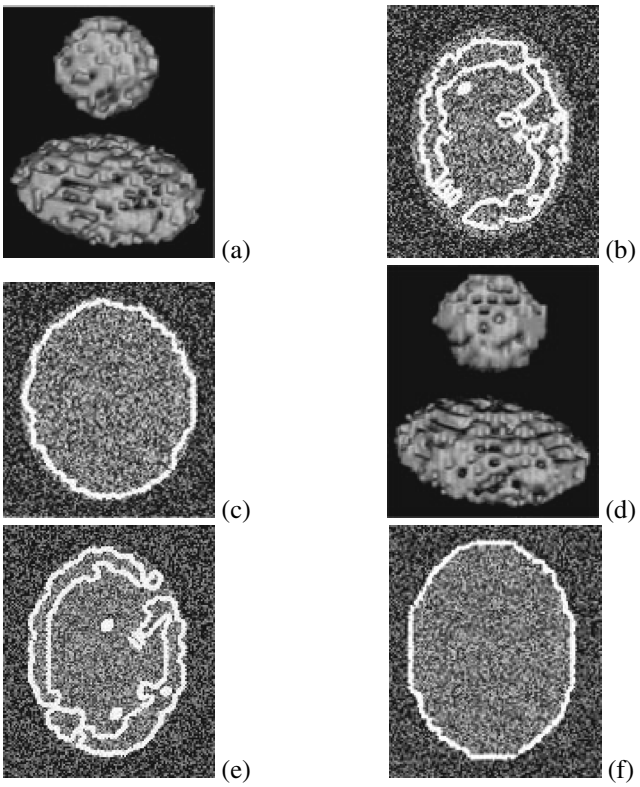


Figure 8. (a) Result for steps (1)–(4) with Gaussian Diffusion. (b) Cross-sections of (a) for slice 40. (c) Cross-section of final solution for slice 40. (d) Result for steps (1)–(4) with Anisotropic Diffusion. (e) Cross-sections of (d) for slice 40. (f) Cross-section of final solution when using anisotropic diffusion (slice 40).

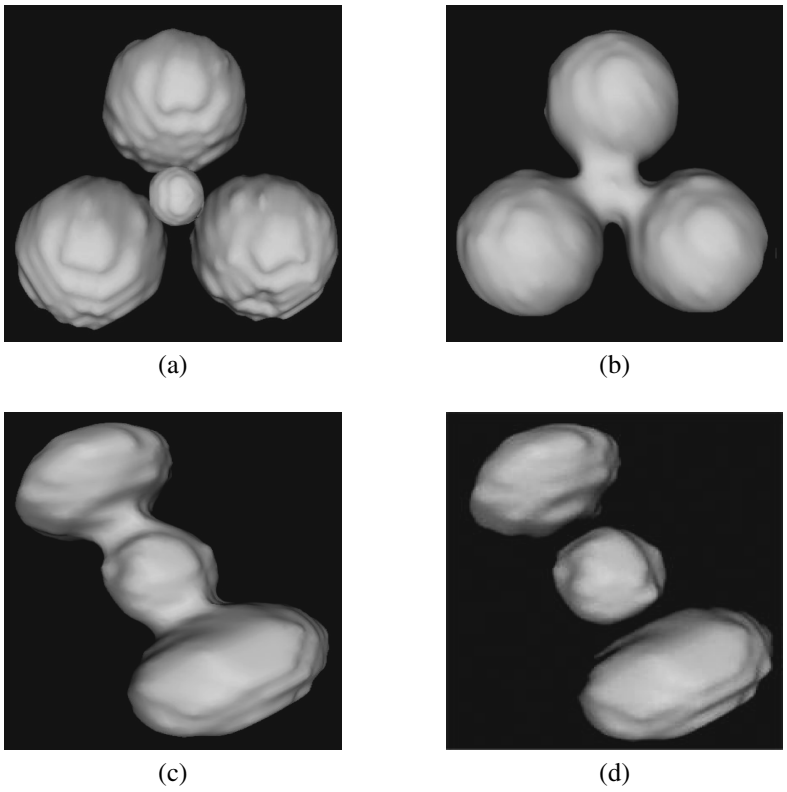


Figure 9. (a)Original objects. (b) Merge through the user interaction method. (c)Partial result. (d) Solution after manual cut.

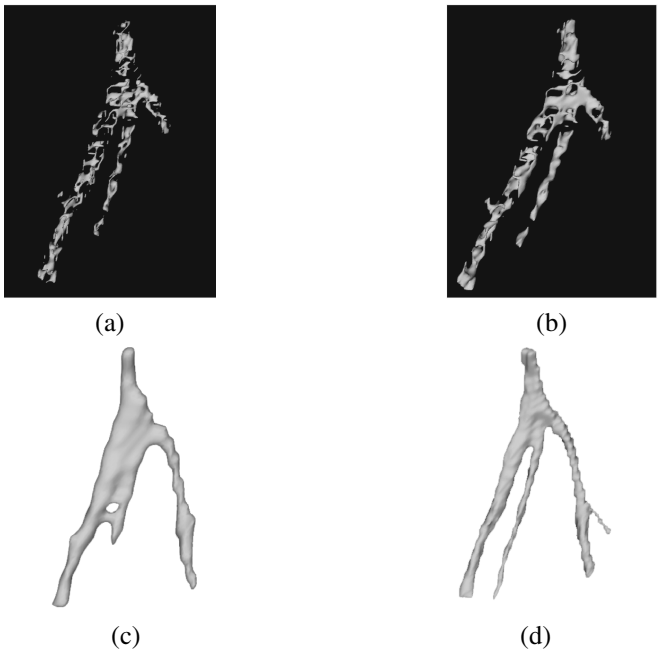


Figure 10. (a) Result of steps (1)–(4) with grid $3 \times 3 \times 3$. (b) T-Surfaces evolution (step 1). (c) Solution for initial grid. (d)Final solution for grid $1 \times 1 \times 1$.

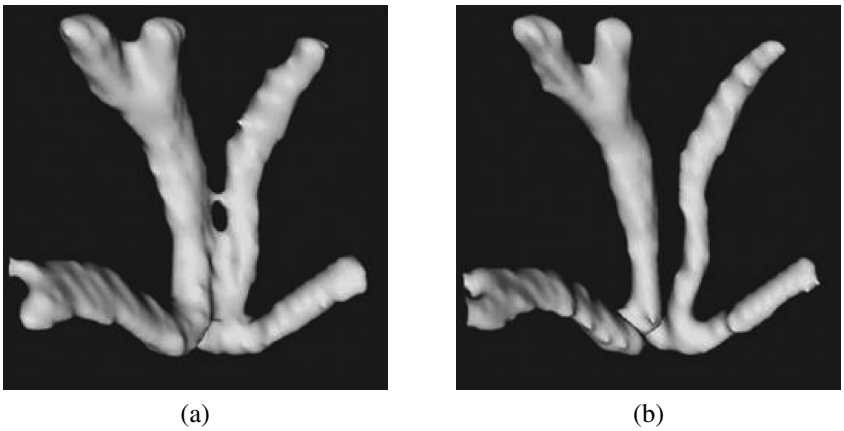
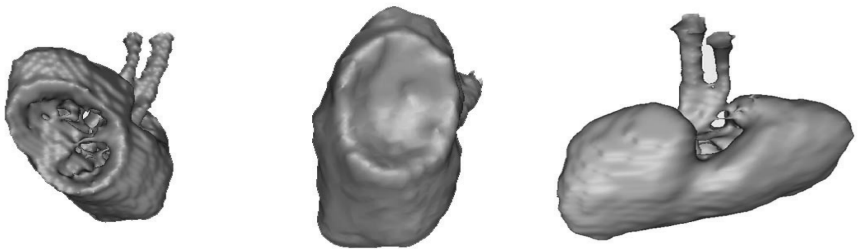
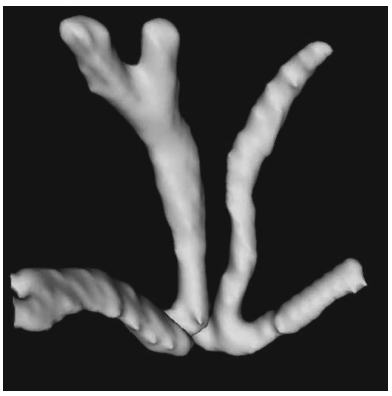


Figure 11. (a) Example showing an incorrect result. (b) Anisotropic diffusion in a pre-processing phase improving the final result.

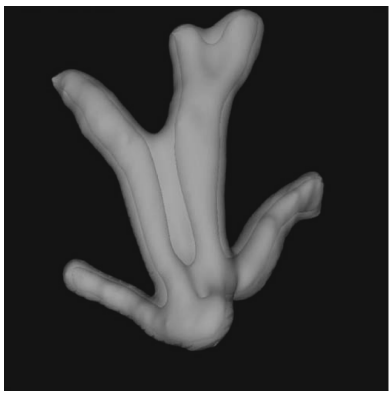


(a) (b) (c)

Figure 12. (a) Result for steps (1)–(4) for CT volume images. (b) View of final solution showing that topological defects were corrected. (c) Another view of the final solution.



(a)



(b)

Figure 13. (a) Initial surface. (b) Offset generated by T-Surfaces model.