

Practical Assignment 3 (Surface Smoothing)

Task 1 (Surface Smoothing).

Create a tool for surface smoothing that offers the *iterative averaging* and the explicit and the implicit integration of the *mean curvature flow*, which were discussed in the lecture. The tool should allow to specify the stepwidth τ .

Task 2 (Shape Interpolation).

Create a tool for shape interpolation. The should allow to select to meshes that have the same face list but different vertex coordinates. Then the Poisson shape interpolation algorithm, we discussed in the lecture, should be used to interpolate the shapes.

Task 3 (User Manual and Summary of Experiences).

Write a short user manual for your tool and a summary of your experiences (2-3 pages).