TU Clausthal

Diplomanden- und Doktorandenseminar
des Instituts für Informatik

Conformal Remeshing

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The process of creating a new triangulation M_2 that approximates the geometry of a given triangle mesh M_1 is known as remeshing. Remeshing can be done with respect to certain objectives, for example, the newly generated triangles may adapt to the surface curvature of the underlying object or shall be as equal in size as possible. Our approach uses a third mesh M_0 in addition to generate a remesh where the shape of the triangles in M_0 is mapped conformally onto the triangles in M_2.

To approximate M_1 with M_2, we designed and minimise two energies, one that measures the geometric distance between M_1 and M_2, another that measures the shape deformation of the triangles in M_2 with respect to the corresponding triangles in M_0. We apply this framework to a sequence of animated meshes that were generated by a reconstruction process from depth camera images.

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15.20 Uhr in Raum 106

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