A Hole-Filling Algorithm for Triangular Meshes

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Abstract

Data obtained by scanning 3D models typically contains missing pieces and holes. These can be caused due to scanning artifacts or artifacts in the surface due to wear and tear. We provide a method based on the Moving Least Squares projection to fill holes in triangular meshes obtained during the process of surface reconstruction. Our method can be applied to holes with non-planar geometry as well as small, planar holes.