

## Sketch-based Adaptive Free-Form Deformations

This paper presents a novel sketch-based adaptive free-form deformation technique founded upon PDE based flow constraints and constructive distance fields. By sketching simple strokes to deform the distance field, the modeled object can be deformed accordingly. Our algorithm can also adaptively refine and improve the model on the fly to accurately represent the deformations by coupling adaptive subdivision and mesh optimization. The mesh quality of the deformed model is improved simultaneously as well.

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