

Fast Shape Deformation using Skinning

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Shape deformation and editing has received much research attention in the past decade. Many works have proposed to formulate deformation as a variational problem and have achieved impressive deformation quality via nonlinear elastic energy minimization. However, usually such high deformation quality comes at a significant computational price. In this talk

I will discuss a series of works that reformulate shape deformation as a skinning problem.

The main challenge then lies in pre-computing

meaningful weight functions and optimizing the (reduced) degrees of freedom in real time. I will show that, when done right, skinning leads to shape deformations that compete with PriMo and other nonlinear elasticity models while running at unprecedented speed.

