

3D Model Organic Surfaces



Traditional approaches to the modeling of 3D objects require extensive background knowledge and skill. Users of 3D modeling programs (e.g., 3D Studio Max or Maya) need to master a wide array of features that create and manipulate polygonal meshes, mostly based on 2D mouse and keyboard input. The surfaces of organic or natural-looking objects such as terrain, rocks, plants, and water can be very difficult to create with standard 3D modeling tools. To help lower the learning curve for 3D modeling, we have been exploring more natural 3D interaction in this domain. Our key insight is that a physical input device made of flexible material can be directly molded and shaped by the user into a representation of the desired surface. Instead of manipulating a single point, a surface can be specified holistically. We believe that this approach is particularly promising for organic surfaces.

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