

## FreeForm Art

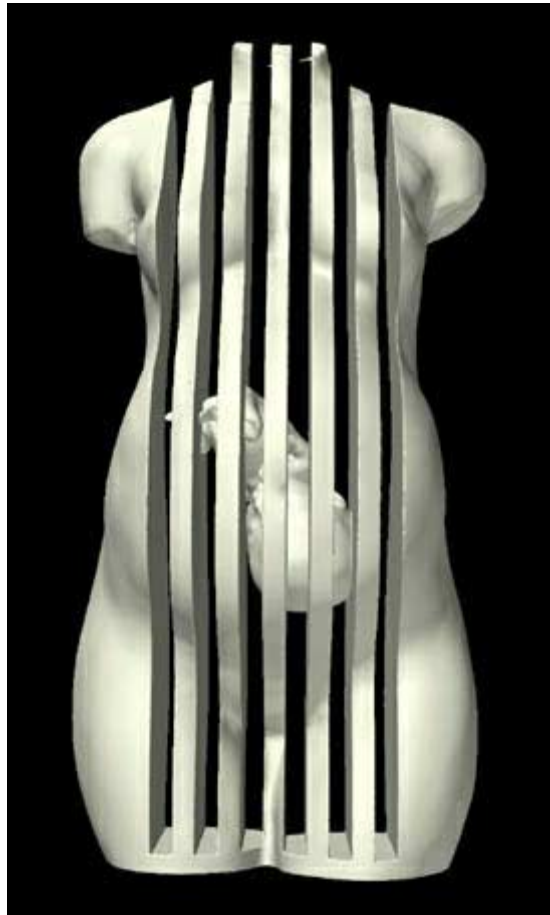
When digital modelers exchanged their sculpting tools and clay for a keyboard and monitor, they lost something precious in the process—the sense of touch. But SensAble Technologies (Woburn, MA) is enabling computer modelers to once again "feel" as they create digital sculptures, using the firm's FreeForm modeling tools.

The technology allows artists to interact with their computers via haptics, or touch, resulting in a more natural and intuitive modeling method. To introduce students worldwide to this modeling method, SensAble provided a FreeForm system to participating schools for a 12-week period. During that time, SensAble and its strategic corporate partner 3D Systems (Valencia, CA), maker of the ThermoJet solid-object printer, challenged the students to create innovative 3D models using the tool set. Each school was encouraged to select one model for entry into a contest sponsored by the two companies.

Claiming first prize was Masanori Tanaka and Tuneko Tamura of the Tokyo National University of Fine Art & Music with their work "In the Light," a model of an expectant mother and the baby within her womb. The piece was created in two parts, one by each artist, and then digitally compiled as a whole. The winning model and three other finalists were selected on the basis of creativity and execution. All four models were output using 3D Systems' stereolithography printers, and displayed at SensAble's booth during the Siggraph conference. For their part, the artists received notoriety among professionals and peers attending the show and, along with all the artists submitting models, a cash prize. For submitting the winning sculpture, the Tokyo National University received three FreeForm systems and a trial of a 3D Systems ThermoJet printer.

"Process changes begin with education, and we realize the importance of making tools available to schools like those participating in the FreeForm challenge," says Thomas Massie, SensAble's founder.

The grand-prize winning model and those of the three other finalists are featured on these pages. -Karen Moltenbrey



"In the Light" by Masanori Tanaka and Tuneko Tamura, Tokyo National University of Fine Art



"Baron Munchhausen" by Mathias Schreck, Filmakademie (Germany)



" Bonsai Tree" by Michael Thomas, Cleveland Institute of Art



"Self Portrait" by Kevin Walker, Rhode Island School of Design

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