Haptic Screen

Hiroo Iwata
University of Tsukuba

Haptic Screen is a new force-feedback device that deforms itself to present shapes of virtual objects. Typical force-feedback devices use a grip or thimble, but users of Haptic Screen can touch the virtual object without wearing anything. Haptic Screen employs an elastic surface made of rubber. A 6 X 6 array of 36 actuators deforms the surface and controls its hardness according to the force applied by the user. An image of the virtual object is projected onto the elastic surface so that the user can directly touch the image and feel its rigidity.

Hiroo Iwata
Institute of Engineering Mechanics
University of Tsukuba
Tsukuba, 305 Japan
iwata@kz.tsukuba.ac.jp
intron.kz.tsukuba.ac.jp

Collaborators
Hiroo Iwata
Hironori Nakagawa
Wataru Hashimoto
Fumitaka Nakaizumi
Iwata Laboratory
Institute of Engineering Mechanics