

Daichi's Artworking: Enjoyable Painting and Handcrafting with New ToolDevices

Yusuke Takami

Mai Otsuki

Asako Kimura

Fumihisa Shibata

Hideyuki Tamura

Ritsumeikan University

One day, a boy named Daichi created a sketch of a lovely table and chair, and he wanted to convert them to 3D models. But he realized that he did not know how. His computer skills were limited.

In conventional computer systems, it is not easy to create 3D models and paint on them, because the human interface provides only a mouse, a keyboard, and a 2D display. This new mixed-reality system solves this problem. Even Daichi can use this system's metaphors of familiar real-life tools to create finished 3D art without learning complex software systems. The system imitates shapes of real tools and provides tactile and audio sensations so users can create and paint on real 2D surfaces, real 3D objects, and virtual objects.

