

# Tangible Bits: Designing the Boundary between People, Bits, and Atoms

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## Abstract

Where the sea meets the land, life has blossomed into a myriad of unique forms in the turbulence of water, sand, and wind. At another seashore between the land of atoms and the sea of bits, we are now facing the challenge of reconciling our dual citizenships in the physical and digital worlds. Windows to the digital world are confined to flat square screens and pixels, or 'painted bits'. Unfortunately, one can not feel and confirm the virtual existence of this digital information through one's body.

Tangible Bits, our vision of Human Computer Interaction (HCI), seeks to realize seamless interfaces between humans, digital information, and the physical environment by giving physical form to digital information, making bits directly manipulable and perceptible. The goal is to blur the boundary between our bodies and cyberspace and to turn the architecture space into an interface between the body, bits, and atoms. In this talk, I will present a variety of tangible user interfaces the Tangible Media Group has designed and presented within the CHI, SIGGRAPH, UIST, CSCW, IDSA, ICSID, and Ars Electronica communities.