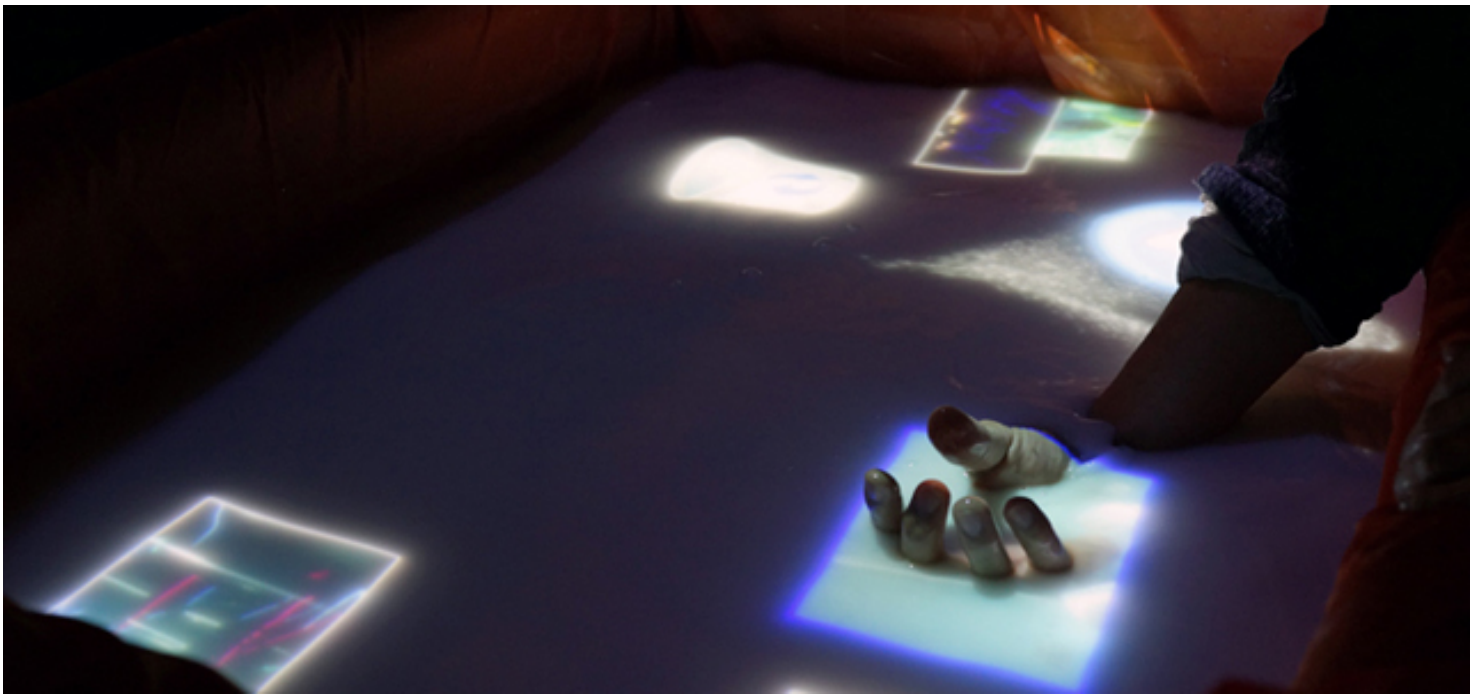

DISPLAY TURNS WATER SURFACE INTO AN INTERACTIVE DIGITAL SCREEN

WORK & LIFESTYLE

The AquaTop consists of a display projected onto the surface of water, controlled by interacting with the liquid.

New ways of interacting with digital displays can bring about important new possibilities for working – as the Kinect-based Intera system for surgeons has proved. Now Japanese researchers have unveiled the AquaTop, which consists of a display projected onto the surface of water, controlled by interacting with the liquid. Demonstrated at the Laval Virtual conference in France earlier this year – where it won the Interface and Materials Award, as well as the Grand Prix – the interface was developed by researchers at the University of Electro-Communications in Tokyo. The AquaTop uses cloudy water to act as a projection surface and – similar to the Intera – detects gestures with a Kinect. The creators engineered the system to use the water surface as an integral part of its control – for example, one action is carried out when users dip their fingertips to interact with a screen object, and another when they approach the item from underneath the water. On-screen items also react to the movement of the water, meaning that they can be moved or changed by simply disrupting the surface with a splash, or scooping up the water and placing it elsewhere. The system has currently been rigged up primarily as a platform for games – with an underwater speaker included to create ripples when a goal is achieved – although the researchers have also demonstrated how it could be used to interact with computer files such as images and video. The following video shows the AquaTop in action:

AquaTop shows the possibilities of widely-available consumer products in the creation of engaging and intuitive new ways to interact with digital objects. Considering how many of us take our devices with us wherever we go, this could be used practically – bringing electronics safely into the bathroom, for example – or for creating unique public displays. If water can become a medium for digital interaction, surely the possibilities are endless? Spotted by: Alexia M

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