RETHINKING INTERACTION

We live in a visual culture, but remember that we also have our ears and our hands. Touch and sound. Presence and weight. Branching out from our visually overloaded domain into more visceral sensing and feeling. How can we design our connected world more holistically, with strong and enriching sensory experiences?

Feedforward

TU/e

Haoyu Dong

Due to the minimal physical presence of microcontrollers, sensors, and actuators, interactive devices are increasingly “disappearing” into a wide range of physical environments. However, this context of disappearing interaction may cause confusion to users regarding where and how to interact with embedded interfaces. This research-through-design focused project investigates disappearing interaction in the case of interactive textiles. As a tangible user interface for volume control, Feedforward provides both visual and shape-changing effects. Touch the textile interface with a finger and draw a circle, rotating your touch. Feedforward investigates the relationship between signals of control and effects on the external environment.

Christian Sivertsen

TU/e

GazeDisplay

Communication technologies should support human expression, and in the case of video calls there is ample room for improvement. The GazeDisplay is a webcam sized device which enriches the sense of presence in a video call by letting you know what your conversation partner is looking at. This enhanced level of interaction, enabled by eye-tracking technology, is particularly relevant in the case of children attending school through video calls, or in telemedicine where trust and understanding are very important. Here, a video call including gaze information is established between two computers, allowing visitors to experience the system first hand.

Sound of a Smart Home

TU/e

Eva van der Born

While smart devices and the data that they gather, compute, and report have brought us convenience, the way in which these devices communicate the status of a smart home is often via heavily quantified visual information displays. In contrast to the standard of a hypervigilant connected product, Sound of a Smart Home is a calm and unobtrusive object that provides a summary of the activity of all connected products within the home in the form of a unique, 20-second soundscape played every hour. By using sound as a medium, this project proposes an alternative, more intuitive way to experience your smart home as a whole and as an evolving ecosystem.

Lisa de Vries

TU/e

EQO Radio

The routine events of our everyday lives may feel mundane, but ultimately they are an expression of who we are as a person at that period of time. This project is about allowing people to reflect on moments from their everyday lives through captured sound bites. With the EQO interactive radio, a user can listen to a sound-based summary of a stretch of time in their life. They can scroll through time to hear sounds from former time periods and can also randomly retrieve previous sound bites. By using the experiential medium of sound to trigger personal reflection, EQO aims to make people more aware of the diversity, frequency, and value of their everyday experiences.

Feel the Vibe: Vibroacoustic Sound Healing 2.0

TU Delft

Ariëla van Elteren
Daniel Hesselman
Thomas Imhoff
Leonie Remmerswaal
Janita Siriseth
Caiseal Beardow
Willem van der Maden
Dan Shor
Linda Plaude
Martin Havranek
Jess Harcher-O'Brien
Tomasz Jaskiewics
Derek Lomas

Feel the Vibe is a whole-body interface that leverages vibroacoustic resonance as a communication medium. Visitors climb into a vibrating web, while other visitors pull on cables transmitting physical vibrations and Solfreggio sacred music. Designed in collaboration with Vibe Research Labs, this installation explores the future of sound healing, an ancient practice that remains popular in integrative medicine and yoga. Our work links sound healing to contemporary neuroscience, which is actively exploring the role of 40hz oscillations in the treatment of psychiatric disorders. What frequencies will resonate with visitors of DDW?