

Haptogram- Aerial display of 3D vibrotactile sensation

【Main Content】:

We introduce Haptogram, a system designed to provide a 3D tactile feedback by employing acoustic radiation pressure; similar to a hologram providing a 3D visual display.

【Previous research related to haptic displays can be divided into three categories】:

Wearable displays, touch screen displays and non-touch displays.

【Haptogram】:

Haptogram is a system that provides 3D tactile feedback via focused ultrasound, and requires no physical contact with the human skin. The tactile sensations are displayed by generating acoustic radiation forces where a phased array of ultrasonic transducers is used to exert forces on a target point in 3D space. Moving the point of tactile stimulation at very high speed along a 3D model creates 3D tactile experience.