

Deep Space Game (Yoichi Nagashima)

This work is a multimodal interactive sound installation(game) with special interface: eight rubbing/tactile sensors. Experience visitor controls sounds and 3D graphics with this interface in realtime, immerse oneself in the output multimedia (virtual space). In addition to that, the rubbing/tactile sensors return to fingers with real physical reaction which sensory reminds about the real and virtual. The game has two modes, first a "practice" mode with static graphics to understand the relationship between sensor control and the generated sound/3D graphics, and then a "challenge" mode with dynamic graphics to control the sensors for a state of deep space immersion.

This system is as a "Serious Game", for "MCI prevention" (activating the brain through the sense of touch at the fingertips in conjunction with hearing and vision). According to the theory of Interoception, the rubbing/tactile sensor operation and soft physical reactions of this system are closely related to human Emotion/Feeling, etc. By paying attention to all eight fingers, applying and relaxing pressure to gently and evenly press the sensor, and experiencing the accompanying sound and 3D graphics biofeedback, humans involuntarily smile and experience a sense of wellness with gentle feeling. Professionals who experienced this installation work (nursing, caregiving, therapy) gave it high marks for its significance as a serious game effective for rehabilitation.

