

Title:

Effects of olfactory and haptic senses in networked virtual environment

Abstract:

Recently, a number of researchers have been paying attention to multisensory communications. By using haptic and olfactory senses in addition to visual and auditory senses, for example, users at remote different places can touch and feel the smells of remote objects, and they can get high realistic sensations and immerse themselves in the virtual environments. Therefore, multisensory communications with haptic and olfactory senses are utilized for various applications such as remote education, games, and so on. In this talk, I first explain the features of haptic and olfactory senses. Then, I will introduce applications employing haptic and olfactory senses. Then I will demonstrate the effects of haptic and olfactory senses on realistic sensations. Furthermore, In order to improve the effects of olfactory sense, we introduce a dynamic output timing control of olfactory and investigate the effects by QoE (Quality of Experience) assessment.