

The Application of Computer Communication Assistant Access — A Study on Exploration of Augmented Reality for Disabilities

Sun, Tzuoh-Herng

**Assistant Professor, Graduate School of Visual communication Design
Tainan University of Technology**

Jhang, Ci-Ling

Graduate School of Visual communication Design, Tainan University of Technology

Abstract

This design research focuses on the communication problems of cognitive disabilities and their families in Taiwan. Using information and interface design to integrate personal assistive technology for special education and rehabilitation. Most people use computers to manage and deliver their affairs frequently, but there are not modified systems that can be used properly by cognitive disabilities and their families. Our government pays more and more attention on the benefits of individuals with disabilities, and assistant facility providers develop new models and systems continually, but most systems lack ancillary communication interface to help individuals deal with different situations. Via barrier free access of computer interface design, cognitive disabilities won't live within their limitations and easily to communicate their family even outside of society. This design research will investigate and analyze existing computer assistive technology, seeking the methods to integrate augmented reality and computer interface design, and apply them for effective communication environment between cognitive disabilities and their families.

Keywords: Computer interface design, Barrier free access design, Augmented reality