## World Academy of Science, Engineering and Technology International Journal of Information and Communication Engineering Vol:11, No:11, 2017

## Real-Time Demonstration of Visible Light Communication Based on Frequency-Shift Keying Employing a Smartphone as the Receiver

Authors: Fumin Wang, Jiaqi Yin, Lajun Wang, Nan Chi

**Abstract :** In this article, we demonstrate a visible light communication (VLC) system over 8 meters free space transmission based on a commercial LED and a receiver in connection with an audio interface of a smart phone. The signal is in FSK modulation format. The successful experimental demonstration validates the feasibility of the proposed system in future wireless communication network.

Keywords: visible light communication, smartphone communication, frequency shift keying, wireless communication

Conference Title: ICICT 2017: International Conference on Information Communication Technology

Conference Location: Kyoto, Japan Conference Dates: November 16-17, 2017