Home IoT device certification through Speaker Recognition

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Abstract— **IoT is a computing device, which identifies things in daily use and has the ability by mutual recognition of transferring data over a network. A home IoT device has a simple function to control things in the home environment. This has basic functions and a smaller interface than other IoT devices. For these reasons, security technology is often overlooked. If home appliances are operated by unauthorized voices, it is risky for home security. Therefore, introduction of security technology is urgent.**

There are many security technologies in various fields that can be embedded into an IoT device. Among these technologies, biometric recognition technology is the best to be utilized. It can be expected to increase security and convenience by applying Speaker Recognition through this biometric recognition technology.

This paper illustrates voice recognition technology and the trend of security that also proposes a system to control functions of daily living in the home environment in which it is operated by an authorized user's voice key through the verification process of Speaker Recognition.

Keyword— **Speaker Recognition, Home IoT, Biometric recognition**

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