

# **Accessible Smart Home System for Deaf and Hard-of-Hearing**

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Currently smart home systems are not accessible to deaf and hard-of-hearing (DHH) residents. The purpose is to build a notification system that can be integrated with smart home systems. It will allow DHH people to be notified when appliances produce sounds in a home environment. The Internet of Things (IoT) platform is used to provide engineers a development environment which allows them to develop a cost effective and customizable application for different possible accessibility solutions that will benefit the DHH community. Consumer demand is driving adoption IoT as the new technology to improve home, energy savings and safety that will make new things we haven't even thought of yet. The IoT is based on a powerful embedded controller with Bluetooth and Wi-Fi technologies. These technologies can ultimately be used to improve access to a wide variety of electronic and communication devices. Because of on-going development of specific solutions for the accessibility needs, it reduces the development cycle by creating a common platform as a base for most solutions. The benefits of low cost, small physical footprint and the ability to move from research to commercialization will be discussed.

## **Biography**

Joe Stanlislow is an Assistant Professor of the Information and Computing Studies. Before joining the NTID faculty he worked for AT&T Bell Laboratories as an electrical engineer, physical designer, and computer programmer for 20 years. He received his BS from RIT and MS in CS from Stevens Institute of Technology.