**Curious about ‘smart speakers’? A demonstration and evaluation of Google Home, Siri and Amazon Echo.**

This entry-level session will introduce participants to the use of voice-controlled digital assistants including Apple’s Siri and the Amazon Echo and Google Home ‘smart speakers’. A digital assistant has the potential to perform a range of home control functions - come along to find out more about the functions of these devices and considerations for their set-up and implementation.

Voice control promises a quick and convenient way to interact with a device. Potential benefits of using voice control include perceived simplicity of use, improved aesthetics and speed of operation (Judge et. al., 2009). While there are concerns about errors in recognition and a lack of reliability when using speech input (Judge, Robertson, & Hawley, 2011), this may be addressed with improvements in contemporary speech recognition algorithms and increased processing speeds (Myburg et al., 2017).

While voice control has been available for several years, the use of voice to operate home or environmental control systems often required bespoke solutions. These solutions typically involved expensive hardware and software, specialised skills to set-up, and extensive user-training, determination and resilience to implement with any success (Judge et. al., 2009). As a result, assistive technology professionals have expressed a reluctance to recommend voice-control, and this input method was often considered a last resort, if at all (Judge et. al., 2011).

The increased availability of everyday technologies that can effectively be used with voice input presents an opportunity for a wider range of people to utilise this access method. The session will include practical demonstrations and present findings from user-experiences, extensive testing and research. Differences among the three assistants will be highlighted, including responsiveness and the availability of alternative access options. The strengths and challenges of implementing each system will be discussed and compared with the use of other options for home control.

**References**

Judge, S., Robertson, Z., Hawley, M., & Enderby, P. (2009). Speech-driven environmental control systems - a qualitative analysis of users' perceptions. *Disability & Rehabilitation: Assistive Technology, 4*(3), 151-157.

Judge, S., Robertson, Z., & Hawley, M. S. (2011). The limitations of speech control: perceptions of provision of speech-driven environmental controls. *Journal of Assistive Technologies, 5*(1), 4-11.

Myburg, M., Allan, E., Nalder, E., Schuurs, S., & Amsters, D. (2017). Environmental control systems–the experiences of people with spinal cord injury and the implications for prescribers. *Disability and Rehabilitation: Assistive Technology, 12*(2), 128-136.