

**Navigating the Aural Web**  
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**Abstract**

The current paradigm of web navigation poses great obstacles to users in two eyes-free scenarios: mobile computing and information access for the visually-impaired. The common thread of these scenarios is the inability to efficiently navigate complex information architectures, due to the mechanical and cognitive limitations emerging while listening to instead of looking at information and navigation prompts. New paradigms for aural navigation design are still unexplored, yet they are crucial to address increasingly important requirements. Inspired by the effective practice of human-to-human aural dialogues, we present a work-in-progress research funded by a 3-year NSF grant that introduces innovative design strategies for aural navigation in complex information architectures typical of the web. Specifically, in this exhibit we introduce and demonstrate design patterns supporting aural back navigation in large collections, aimed at improving the efficiency and usability of aural navigation. Current evaluation thrusts of the new navigation techniques involve blind users accessing the web through screen readers and sighted users using a mobile application prototype.