



## CALL FOR PAPERS

### Special Issue

#### **Auditory Displays and Auditory User Interfaces Art-Design-Science-Research**

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Deadline for paper submission: May 1, 2019

This special issue concerning Auditory Displays and Auditory User Interfaces: Art-Design-Science-Research (ADSR) is motivated by the theme of the 2018 Conference of ICAD (International Community for Auditory Display), a wordplay on the term “ADSR” (Attack-Decay-Sustain-Release), commonly used in sound-related domains. This is an open call to authors for contributions under this broad theme. We welcome technical, theoretical, and empirical papers that can contribute to any aspect (art, design, science, and research) of auditory displays and auditory user interfaces.

Designers and researchers have tried to make auditory displays and auditory user interfaces more useful in numerous areas, extending typical visuo-centric interactions to multimodal and multisensorial systems. Application areas include education, assistive technologies, auditory wayfinding, auditory graphs, speech interfaces, virtual and augmented reality environments, and associated perceptual, cognitive, technical, and technological research and development. *Research through design* or *embedded design research* have recently become more pervasive for auditory display designers. Hence, we welcome all types of “design” activities as a necessary process in auditory display. In addition, methodical evaluation and analysis have become more prominent, leading to more robust science. In this iterative process, auditory displays can achieve improved reliability through robust and repeatable research. In some areas, we have already arrived at the *science* stage, while in other areas we are still exploring the possibilities.

Pursuing novelty encourages artists to seek the integration of different genres and transform modalities. By definition, auditory displays and sonification *transform* data into sound. Thanks to the characteristics of this transformation, there have been active interactions between auditory displays and various forms of art. Hence, we would also like to invite contributions addressing artistic approaches to auditory displays and auditory user interfaces.

Rather than insisting on a specific approach, we encourage a broad spectrum of diverse strategies. In other words, all these approaches – art, design, science, and research – should be balanced and utilized more flexibly depending on the circumstances.

**Topics of interest** for this special issue include, but are not limited to, the following:

- Multimodal user interfaces (auditory + visual/haptic/tactile/olfactory/gustatory, etc.)
- Auditory displays inspired by music or other forms of art
- Culture-specific auditory displays
- Speculative, aspirational prototype designs, case studies, and real-world applications
- Aesthetics of auditory displays and auditory user interfaces
- Auditory display design paradigm, theory, and taxonomy
- Design methods, processes, tools, and techniques
- Users, experiences, and contexts of auditory displays and auditory user interfaces
- Development of new sensors, devices, or platforms for auditory displays and auditory user interfaces
- Accessibility, inclusive design, and assistive technologies
- Computational/algorithmic approaches
- Human Factors, Ergonomics and Usability
- Auditory displays with a focus on spatial/3D sound
- Sonification in Health and Environmental Data (soniHED)
- Sonification in the Internet of Things, Big Data, or Cybersecurity
- Sonification in vehicles

**Schedule:**

Submission deadline: May 1, 2019

1<sup>st</sup> round review: August 1, 2019

2<sup>nd</sup> round review: October 1, 2019

Publication: Spring 2020

**Authors Instructions:**

Submissions should be 8-12 pages long, presenting original unpublished work. Previously presented conference and workshop papers should include a minimum of 30% new content. The authors will be required to follow the Author's Guide for manuscript submission to the Journal of Multimodal User Interfaces published by Springer.

(<http://www.springer.com/computer/hci/journal/12193>)

During the submission process, please select “S.I. : Auditory Display 2018” as article type.