

Ableson: Towards Cheap and Cheerful Sonification of Time Series Data

Cárthach Ó Nuanáin (MTU Cork School of Music)
Alan Giltinan (Blackrock Castle Observatory)
{firstname.lastname}@mtu.ie

Context:

- Sonification, as defined by Kramer (2000) is “[to represent] data with non-speech sound”.
- Sound can unearth patterns or insights to complex data that are not immediately inherent in other modes (e.g. visualisation) and enables visually impaired to understand and study scientific data.

Problem:

- As we have demonstrated in previous work exploring the sonification of protein structures (Ronan et. al. 2024), it can be technical and time-consuming, often involving several domain experts.

Solution:

- *Ableson* is an open-source, easy-to-use set of tools that integrates easily into a commercial Digital Audio Workstation (DAW) for rapid prototyping and sound generation.
- We demonstrate its efficacy in a case study using galactic telescope data collected by MTU Blackrock Castle Observatory.

