
Sustainable Software for Reproducible Research in Audio and Music*

Mark Plumbley

Abstract

The need to develop and reuse software to process data is almost universal in audio and music signal processing research. Many signal processing methods are developed in tandem with software implementations, and many of them are too complex or too fundamentally software-based to be reproduced readily from a published paper alone. For this reason, it is helpful for sustainable research to have software and data published along with papers, enabling "Reproducible Research" that allows other researchers to validate and build on earlier research. However, in practice, non-publication of code and data is still the norm and research software is commonly lost in the years following publication of the associated methods. In the project SoundSoftware.ac.uk we are working on ways to improve this situation in the UK audio and music research community. In this talk, I will discuss common barriers to publication of research software and data, consider how individual researchers can overcome these barriers, and make some recommendations for research groups on how to improve their approach to research software development.

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