
A demo of AMUSE (Advanced MUSic Explorer)

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Abstract. A large variety of research tools is available for music information retrieval tasks. Since the available tools are very different in target domain, range of available methods, learning efforts, installation and runtime characteristics etc., it is not easy to find software which is optimal for certain research goals. Some applications are perfect for a specific and limited domain (e.g. estimation of the ground frequency), other software packages are too generic and complex, so it is not easy to use them for the concrete MIR tasks. Another problematic issue is that many incompatible data formats exist, so it is not always possible to use output from one tool just as input for another one.

In the for ISMIR 2010 accepted poster presentation ‘AMUSE (Advanced MUSic Explorer) - A Multitool Framework for Music Data Analysis’ we introduce another open-source framework, which aims to facilitate the interaction between these applications. The features of AMUSE are easy integration of different MIR tools, strictly defined interchange formats, and possibility to design large empirical studies for many music classification tasks. Own feature processing, classification evaluation and optimization methods are available and can be extended by further algorithms.

In the corresponding demo we show how the different experiments can be designed: audio feature extraction, feature processing, music classification, validation of classifiers and optimization of feature selection by evolutionary strategies.