

Audio Information Retrieval in Mobile Environment with Fast Audio Classifier

Authors : Bruno T. Gomes, José A. Menezes, Giordano Cabral

Abstract : With the popularity of smartphones, mobile apps emerge to meet the diverse needs, however the resources at the disposal are limited, either by the hardware, due to the low computing power, or the software, that does not have the same robustness of desktop environment. For example, in automatic audio classification (AC) tasks, musical information retrieval (MIR) subarea, is required a fast processing and a good success rate. However the mobile platform has limited computing power and the best AC tools are only available for desktop. To solve these problems the fast classifier suits, to mobile environments, the most widespread MIR technologies, seeking a balance in terms of speed and robustness. At the end we found that it is possible to enjoy the best of MIR for mobile environments. This paper presents the results obtained and the difficulties encountered.

Keywords : audio classification, audio extraction, environment mobile, musical information retrieval

Conference Title : ICMR 2016 : International Conference on Multimedia Retrieval

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : February 11-12, 2016