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# **Automatic Music Transcription with User Interaction**

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This publication describes a software toolbox that bundles different algorithmic solutions directed towards the automatic extraction of symbolic note information from digitized pieces of music. In the field of Music Information Retrieval (MIR), this process is often referred to as automatic transcription and is widely acknowledged as an ambitious task. Seemingly a research object of purely scientific interest, the automatic transcription of music potentially provides various fruitful application scenarios. Creative communities enjoying music performance and production can greatly profit from automatic music transcription technologies since they allow aficionados to quickly practice their favourite song without being experienced with manual transcription. However, automatic transcription is a very demanding research area, both from the signal-processing as well as the musicology point of view. There still exist no definitive solutions for problems like mimicking the human perception or coming to a decision between ambiguous candidates for symbolic representation. Therefore, the current publication describes a software tool enabling the detection and classification of drum notes, bass notes, main melody notes and chord structure from digitized music pieces in conjunction with possibilities for intervention of a human user. The additional user interaction allows the achievement of comprehensive and satisfying transcription results even in difficult cases.