From Audio to Music Notation

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Automatic Music Transcription

Problem: Converting music signals into some form of human- or machinereadable music notation, such as western staff notation.

Applications: Music recommendation, interactive music systems, and digital musicology...

In this poster, We present our work on automatic piano transcription by an endto-end method and a step-by-step method.

End-to-end	Step-by-step
method	method
 Directly convert music signals into musical scores 	 Firstly predict note sequences from music audio, then predict rhythm structure

Designed for transcribing popular piano music. Achieves an overall accuracy of 88.0% on pitch estimation, and 87.8% on musical score prediction on the MuseSyn dataset.

End-to-end Method Example







Designed for transcribing classical piano music. Uses an existing MIDI performance transcription system with 96.7% accuracy on the MAESTRO dataset, and a beat tracking system with 76.7% accuracy on the MAPS test set.





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Step-by-Step Method Example