Societal Impact of Automatic Music Transcription Systems

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#### 1. Introduction:

Automatic Music Transcription (AMT) refers to the process of converting an audio recording of music into a written musical score. With recent developments, AMT has become increasingly accurate, efficient, and accessible. Automatic Music Transcription systems have the potential to significantly impact the way we interact with music. This paper explores the societal impacts of AMT, focusing on its implications for musicians, music education, and accessibility.

## 2. Impacts on Musicians:

AMT has the potential to revolutionize the way musicians compose, practice, and collaborate. Musicians can record their compositions and use transcriptions generated by AMT instead of manually composing their musical score, increasing their efficiency and eliminating human error in transcribing. Additionally, AMT tools can assist in the learning new pieces, allowing musicians to easily transcribe and analyze pieces they want to study.

### 3. Educational Implications:

In the realm of music education, AMT has the potential to aid learning to read sheet music and making music theory more accessible to beginners. Music instructors can use AMT as a tool to create their own exercises and drills for students to practice. Students can also use it interactively to see visually the notes they are playing, helping to acquaint and familiarize themselves with sheet music.

### 4. Accessibility:

AMT can contribute to making music more accessible to individuals with disabilities. For example, visually impaired musicians and students can benefit from AMT-generated braille music. Instead of outputting sheet music, AMT can output braille score. There are many works that have not been transcribed to braille yet, thus AMT has the potential to make a great impact in helping visually impaired musicians.

#### 5. Conclusion:

Automatic Music Transcription has the potential to bring about transformative changes in the way we compose, learn, and analyze music. AMT is fast, accurate, and takes the manual labor out of music transcription so musicians and music students can focus on the music without having to waste time translating. It can be a great tool in musical education and can even help the visually-impaired gain access to written music that had never been transcribed in braille before.