

Real-time monophonic guitar transcription

Luc de Jonckheere

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Abstract

Short summary.

1 Introduction

Intro the scope (AMT, guitar→digital, real-time).

The goal of the paper (real-time monophonic AMT, research effectiveness of commonly used methods) and our focus (using Fourier and other signal processing algorithms). Note about building upon research project.

Application (hexaphonic guitar pick-up to MIDI).

Note about other research (no usable code, no data sets).

2 Related work

Other papers. Sample citations [2] [3] [1].

3 Preliminaries

Jargon required to understand this paper.

4 Paper content

Actual research etc.

5 Experiments

Test the system.

6 Conclusions

What we did in this paper. Reflection on the performance of the system. Final reference to the source code/dataset location.

7 Future work

What could still be improved/further researched.

References

- [1] FFTW3 page about two times speed-up by omitting complex part.
http://www.fftw.org/fftw3_doc/One_002dDimensional-DFTs-of-Real-Data.html
Last accessed on 12-04-2021.
- [2] S.S. Limaye K.A. Akant, R. Pande. Accurate monophonic pitch tracking algorithm for QBH and microtone research. *The Pacific Journal of Science and Technology*, 11(2):342–352, 2010.
- [3] K. M. M. Prabhu. *Window Functions and Their Applications in Signal Processing*. CRC Press, 2013.