**Articles to Use**

**---------------------------------------------------Pitch Extraction---------------------------------------------------**

1. **Chromagram: Automatic chord identification using a quantised chromagram**

Harte and Sandler [2005].Christopher Harte and Mark Sandler. In Proceedings of AES 118th Convention, Barcelona, 2005.

<http://www.aes.org/tmpFiles/elib/20170225/13128.pdf>

1. **Modelling the acquisition and representation of musical tonality as a function of pitch-use through self-organising artificial neural networks**

Niall John Lee Griffith University of Exeter, UK 1993

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.54.6265&rep=rep1&type=pdf>

1. **Chroma-based estimation of musical key from audio-signal analysis.**

[Geoffroy Peeters](http://dblp.uni-trier.de/pers/hd/p/Peeters:Geoffroy) [ISMIR 2006](http://dblp.uni-trier.de/db/conf/ismir/ismir2006.html#Peeters06): 115-120.

<http://recherche.ircam.fr/anasyn/peeters/ARTICLES/Peeters_2006_ISMIR_KeyHPS_ppt.pdf>

* It is A LONG Powerpoint presentation.

1. **Key, Chord, and Rhythm Tracking of Popular Music Recordings**

Arun Shenoy & Ye Wang. MIT press Journals. Computer Music Journal.

<http://www.mitpressjournals.org.ezproxy.library.uvic.ca/doi/pdf/10.1162/0148926054798205>

* Key Estimation

1. **A High Resolution Pitch Detection Algorithm Based on AMDF and ACF**

K. Abdullah-Al-Mamun, F. Sarker, and G. Muhammad

<http://www.utdallas.edu/~hynek/citing_papers/Mamun_A%20High%20Resolution%20Pitch%20Detection%20Algorithm.pdf>

* Noise robust high resolution pitch detection algorithm based on AMDF and ACF

**-------------------------------------------------Rhythm Detection-------------------------------------------------**

1. **Rhythm and periodicity detection in polyphonic music**

Masoud Alghoniemy, Ahmed H. Tewfik: MMSP 1999: 185-190

<http://ieeexplore.ieee.org/document/793818/?reload=true>

* Detecting periodicities with binary trees and trellis network.

1. **Self-adjusting beat detection and prediction in music**

Robert Harper, M. Ed Jernigan: ICASSP (4) 2004: 245-248

<http://ieeexplore.ieee.org/document/1326809/?part=1>

* Timing networks which decide what the best ‘hypothesis’ is

1. **Real-time beat tracking for drumless audio signals: Chord change detection for musical decisions**

Masataka Goto, Yoichi Muraoka. Speech Communication 27(3-4): 311-335 (1999)

<http://www.sciencedirect.com/science/article/pii/S0167639398000764>

1. **Machine Rhythm: Computer Emulation of Human Rhythm Perception**

Rosenthal, D. MIT Media Lab. Ph.D Thesis. (1992)

<https://dspace.mit.edu/handle/1721.1/12855>

1. **Tempo and beat analysis of acoustic musical signals**

Eric D. Scheirer, " Journal of the Acoustic Society of America, pp. 588-601, Val 103, No. 1, January 1998.

<http://asa.scitation.org.ezproxy.library.uvic.ca/doi/10.1121/1.421129>

* Polyphonic multi timbral acoustic beat detection. Use a bank of resonators to determine phase locking of beats.

1. **Rhythm Tracking Using Multiple Hypotheses**

D. Rosenthal, M. Goto, and Y. Muraoka. Proc. of the 1994 Int. Computer Music Conference, International Computer Music Association, San Francisco, pp. 85-87, 1994.

<http://quod.lib.umich.edu/i/icmc/bbp2372.1994.022/1>

1. **Tracking musical beats in real time**

Allen, P.E., Dannenberg, R.B. In: Proceedings of the 1990 International Computer Music Conference. pp. 140–143

<http://quod.lib.umich.edu/i/icmc/bbp2372.1990.036/1>

* Based on tracking states and pruning by different criterion to reduce computational overhead.

1. **Advanced issues in beat induction modeling: syncopation, tempo and timing**

Desain, P., Honing, H. In: Proceedings of the 1994 International Computer Music Conference. pp. 92–94.

<http://quod.lib.umich.edu/i/icmc/bbp2372.1994.025/1>

* Expectancy curves and inter-onset intervals.

1. **Real-time tempo tracking using rules to analyze rhythmic qualities**

Driesse, A. In: Proceedings of the 1991 International Computer Music Conference. pp. 578–581 <http://quod.lib.umich.edu/cgi/p/pod/dod-idx/real-time-tempo-tracking-using-rules-to-analyze-rythmic.pdf?c=icmc;idno=bbp2372.1991.144>

**----------------------------------------------------Miscellaneous----------------------------------------------------**

1. **Polyphonic Pitch Identification and Bayesian Inference**

Ali Taylan Cemgil:ICMC 2004

<http://quod.lib.umich.edu/i/icmc/bbp2372.2004.039/1>

* Complicated, but applies bayesian networks that use probability distribution depending on the # of sources in the input.

1. **Dynamic Bayesian Networks for Symbolic Polyphonic Pitch Modeling**

Stanislaw Andrzej Raczynski, Emmanuel Vincent, Shigeki Sagayama. IEEE Trans. Audio, Speech & Language Processing 21(9): 1830-1840 (2013)

<https://hal.archives-ouvertes.fr/file/index/docid/728771/filename/RT-430.pdf>

* Complicated too.

1. **Neural timing nets**

Cariani, P. (2001d). Neural Networks, 14, 737–753.

<https://pdfs.semanticscholar.org/3328/e323bc85d8c3d3ca8fbad83794edde62fbad.pdf>

1. **Bayesian harmonic models for musical signal analysis**Davy, M. and S. J. Godsill In Bayesian Statistics 7 (2003)

<http://www-labs.iro.umontreal.ca/~pift6080/H08/documents/papers/davy_bayes_extraction.pdf>

* Complicated : polyphonic and monophonic pitch extraction with bayesian networks.

1. **Musicians Make a Standard: The MIDI Phenomenon**Gareth Loy. Computer Music Journal. Vol. 9, No. 4 (Winter, 1985), pp. 8-26. Published by: The MIT Press  
   <http://www.jstor.org/stable/3679619>