

MIREX 2016 submission SB5

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ABSTRACT

This extended abstract describes the onset detection submission: *OnsetDetectorLL.2016*.

1. DESCRIPTION

For technical details of the algorithm, please refer to [1]. The network structure has been modified to use three unidirectional hidden layers with 25 tanh units each. As features, logarithmically filtered and scaled magnitude spectrogram and their first order differences are used.

2. SOURCE CODE

Code of a reference implementation of this algorithm is included in the *madmom* library [2]. It can be found online on GitHub: <http://github.com/CPJKU/madmom>.

3. REFERENCES

- [1] Sebastian Böck, Andreas Arzt, Florian Krebs, and Markus Schedl. Online real-time onset detection with recurrent neural networks. In *Proceedings of the 15th International Conference on Digital Audio Effects (DAFx-12)*, pages 301–304, York, UK, 9 2012.
- [2] Sebastian Böck, Filip Korzeniowski, Jan Schlüter, Florian Krebs, and Gerhard Widmer. *madmom: a new Python Audio and Music Signal Processing Library*. arXiv:1605.07008, 2016.