Accepted Manuscript

# Random Forest Classification based Acoustic Event Detection Utilizing Contextual-Information and Bottleneck Features

Xianjun Xia, Roberto Togneri, Ferdous Sohel, David Huang

PII: S0031-3203(18)30115-8
DOI: 10.1016/j.patcog.2018.03.025
Reference: PR 6503

To appear in: *Pattern Recognition*

Received date: 18 March 2017
Revised date: 22 February 2018
Accepted date: 27 March 2018

Please cite this article as: Xianjun Xia, Roberto Togneri, Ferdous Sohel, David Huang, Random Forest Classification based Acoustic Event Detection Utilizing Contextual-Information and Bottleneck Features, *Pattern Recognition* (2018), doi: 10.1016/j.patcog.2018.03.025

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

**Highlights**

- A random forest classification based acoustic event detection system was constructed as the baseline system.
- Contextual information was employed to cope with the acoustic signals with long duration.
- Global bottleneck features were employed in the acoustic event detection system to utilize the prior knowledge of the event category information.
- Category-specific bottleneck features were employed in the acoustic event detection system to utilize the prior knowledge of the event boundary information.
- Evaluations on the UPC-TALP and ITC-IRST databases of highly

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/6938815

Download Persian Version:

https://daneshyari.com/article/6938815

Daneshyari.com