13th European
Signal Processing
Conference
September 4-8, 2005
Antalya
Turkey

PARAMETRIZATION OF INHARMONIC BIRD SOUNDS FOR AUTOMATIC RECOGNITION (MonPmPO2)

✶ Author(s) :

Seppo Fagerlund   (Helsinki University of Technology, Finland)
Aki Härmä   (Philips Research, Netherlands)

✶ Abstract :

We have earlier found that the sinusoidal modeling and related parametrization is a promising technique for the automatic analysis and recognition of typical sounds produced by songbirds. In this article we study techniques that can be used to characterize sounds that cannot be efficiently parameterized using the sinusoidal model. Most familiar examples of such sounds are creaky sounds of Crows and many of the sounds produced, e.g., by Mallards. Often those sounds feature irregular pitch pattern. We introduce a method for feature reduction and optimal feature selection for recognition of bird species.

Menu