

Intruders Detection in Wild Areas – Birds and Chainsaws

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Abstract

*The aim of this paper is to present a way to detect intruders in wild areas, based on TESPAN **A** and **S** matrixes and Artificial Neural Networks. In order to prove the method 2 classes of signals were used: bird audio signals (they are considered to be non-intruders) and chainsaw audio signals (they are considered to be intruders). In the case of the **S** matrixes a 98.7% accuracy was obtained and in the case of the **A** matrixes a 99.0% accuracy. The training time and the complexity are increased in the case of the **A** matrix; also the number of characteristics is increased (1024 instead of 32). The small improvement brought to the classification result (using the **A** matrixes) does not compensate the complexity.*

Biography

Ioana Claudia COCIORAN is a student at Technical University of Cluj-Napoca, Faculty of Electronics, Telecommunications and Information Technology.

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