

**O 22. ENVIRONMENTAL SOUND RECOGNITION WITH VARIOUS FEATURE  
EXTRACTION AND CLASSIFICATION TECHNIQUES**

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**ABSTRACT:** This paper proposes “An Environmental Sound Recognition with various feature extraction and classification techniques” for environmental sound recognition. Study in Environmental Sound Recognition has become popular topic in recent years. In the past decade, research on the Environmental Sound Recognition area has accelerated. ESR has important role on intelligent computer systems and robots for the purpose of identification, recognition and discrimination. In this survey, I will put forward a survey on which various feature extraction and classification techniques is better to recognize environmental sounds. It includes these parts: (i) basic environmental sound-processing, (ii) feature extraction techniques, (iii) classification techniques, and (iv) performance comparison of selected techniques. Finally, concluding remarks and future research and development trends in the ESR field will be given.

*Keywords: Environmental sound recognition, feature extraction techniques, classification techniques*