

Erratum: Adaptive boosting with SVM classifier for moving vehicle classification

Abstract

Profoundly hearing impaired community (PHIC) cannot moderate wisely an acoustic noise emanated from moving vehicle in outdoor. They are not able to distinguish either type or distance of moving vehicle approaching from behind. Therefore, the PHIC encounter risky situation while they are in outdoor. In this paper, a simple system has been proposed to identify the type and distance of a moving vehicle using adaptive boosting (AdaBoost) ensemble method. One-third-octave filter band approach has been used for extracting the significant features from the noise emanated by the moving vehicle. The extracted features were associated with the type and distance of the moving vehicle. A support vector machines (SVM) has been used as a weak classifier during the AdaBoost classification. The AdaBoost classification system outperforms the single classifier system in terms of classification accuracy.

Keyword

Moving vehicle; Adaptive boosting; Support vector machine; One-third-octave