

Voice detection in the sound recorded by a drone

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Abstract

The talk will be focused on the methods and results of the analysis concerning the audio data collected by the DMC team in a series of experiments. The main goal of the research is to find a possible way of applying an UAV (drone) in the mining industry to locate and report people in emergency calling for help. Therefore arises a problem of detection of the human voice in the recorded sound which would certainly contain disturbances. The dominant component of a record is a noise generated by the vanes of a drone. Records from underground and overground environment were taken into account in our investigation. We apply time-frequency decomposition of the signals and use a method based on calculating distance between spectral distributions. Some factors affecting efficiency of the presented method will be briefly discussed along with other possible approaches.