

Environmental Background Noise Dataset

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A dataset of sound files for three different noise types is collected by an Android smartphone (Nexus 5) and provided here for public use. Each sound file is 30 seconds long, sampled at 44kHz sampling rate, and appears in '.wav' format. The noise types include machinery (stationary statistical characteristics), drivingcar (semi-stationary statistical characteristics) and babble (non-stationary statistical characteristics). The following references must be cited whenever this dataset is used in any shape or manner:

- [1] F. Saki, A. Sehgal, I. Panahi, and N. Kehtarnavaz, "Smartphone-based real-time classification of noise signals using subband features and random forest classifier," to appear in *Proc. of IEEE ICASSP*, China, 2016.
- [2] F. Saki and N. Kehtarnavaz, "Automatic Switching Between Noise Classification and Speech Enhancement for Hearing Aid Devices," submitted to *IEEE EMBC Conference*, 2016.