Real-time implementation of hearing aid with combined noise and acoustic feedback reduction based on smartphone Maxim Vashkevich 1, Elias Azarov 2, Nick Petrovsky 3, Denis Likhachov 5, Petrovsky A. A. 4

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Abstract: The demonstration presents a real-time mockup of smartphone- based hearing aid with combined noise and acoustic feedback reduction. The designed reduction algorithm is based on

spectral weighting approach which makes it very robust to rapid changes in feedback path either caused by displacement of the speaker/microphone or room acoustics. The aim of the demonstration is to show potential of the implemented solution especially for devices with unfixed speaker and microphone setup.

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