



*Discrimination between direct sound and its recorded playback sound*

Kotaro Sonoda

Division of Electrical Engineering and Computer Science, Nagasaki University

Automatic speaker verification system is a convenient means to communicate commands to a system without touch contact. However, there is a serious problem in that replayed speech recorded stealthily by attacker can be mistakenly verified as the speaker's own voice. This attack, called a replay attack, is very easy to implement, but is difficult to prevent.

In this paper, we propose a method to discriminate between the direct sound and the replayed sound by cepstral analysis, focusing on the multi-recording nature of the replayed sound.