

OVERALL APPROACH (ANALYSIS OF SPEECH SIGNAL SPECTRUMS USING THE L2 NORM)*

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Abstract

This module describes the overall approach.

1 IV – Overall Approach

The overall approach is shown in figure 4.1. A PIN consists of a username and recordings of four separate (though not necessarily unique) numbers. A user is added to the database by adding seven recordings of all PIN numbers.

A candidate is a specified username and a single recording of all PIN numbers. Upon submission to the software, the relevant signal is extracted from the entire candidate recording.

From the database, all seven recordings are combined into an “average” signal. The average signal and the extracted candidate signal are compared – this results in a metric value. Based on this metric, a decision is made as to whether or not the candidate is a match or an impostor.

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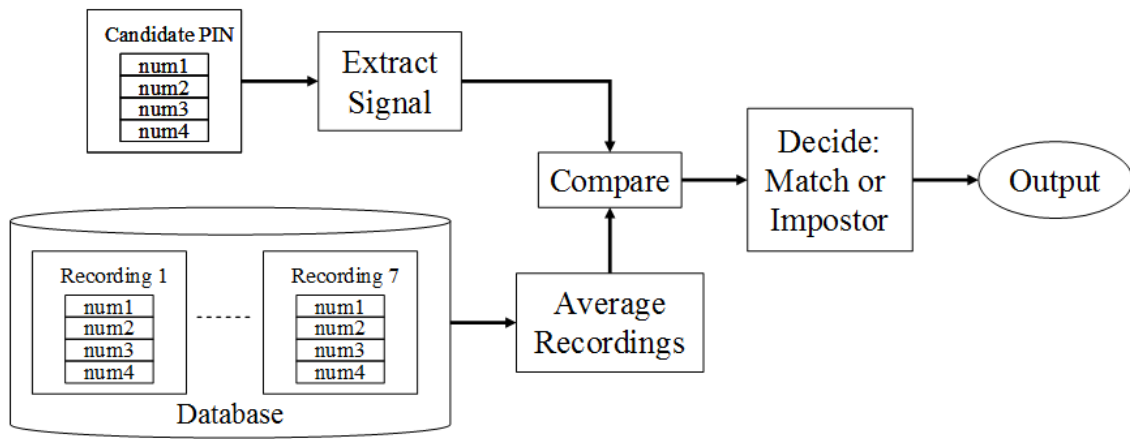


Figure 1

Figure 4.1: Overall approach for speaker identification