



VOICE IDENTIFICATION AND ANALYSIS

VoiceNet

Software system for automatic identification of speakers in telephone channels

The system is designed for automatic identification of speakers in telephone call recordings. VoiceNet compares a pair of voice samples and gives out the match probability.

APPLICATIONS

Police and other law enforcement agencies: Identification of suspected criminals by voice.

Anti-terrorist organizations: Identifying voices of terrorist recorded from phone calls.

Forensic labs: Storage and quick identification of speech samples.

HIGHLIGHTS

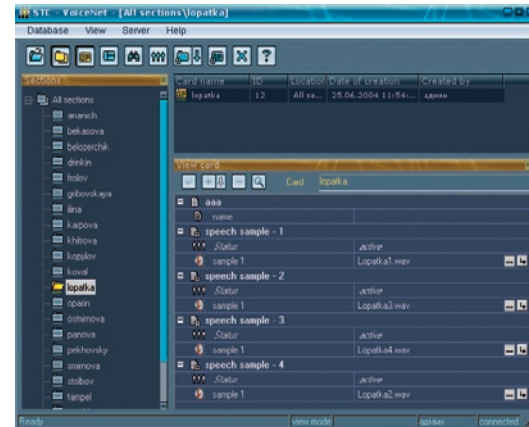
- 2 independent identification methods:
 - spectrum-formant (FFT)
 - pitch curve statistics comparison
- Effective for real signals, containing natural speech and telephone channel distortions
- Works with low quality speech signals
- Automatic identification does not require special user skills
- Language-independent (the speaker's voice can be identified in any language he speaks)
- Standard DBMS allows external database import
- Any additional personal data (photos, fingerprints etc.) can be stored in the same database
- Available as SDK for software developers

SOURCE SIGNAL REQUIREMENTS

- Signal format – 16 bit PCM
- 8 000 or 11 025 Hz sampling rate
- Signal frequency band – 300...3400 Hz or better
- 10 dB or better SNR
- Speech duration for pair comparison – at least 16 seconds for each fragment

NEW FEATURES

- Additional speaker identification method – by pitch statistics
- New DB import/export tools for convenient data exchange
- User adjustable graphical interface
- Faster calculations and result output



SYSTEM DELIVERY

VoiceNet system includes one or more PCs connected via local network (LAN/WAN). The software consists of several independent modules located on client and server PCs:

- SpeechMarker – speech signal segmentation software
- FormeBuilder – database creation, structure editing and access management software
- VoiceNetServer – database server and processing application
- VoiceNetOperator – database client software