VoxScan

Deepfake voice detection
for strategic transmissions

powered by

CANDYVOICE
GLOBAL VOICE SOLUTIONS

Protect your communications against voice deception

CandyVoice

- Expertise in digital voice processing
- Innovative Voice Technologies provider

Envisioned Modes of Collaboration

- Provider of innovative voice-technology components
- Specialized subcontracting
- Collaboration with operational units
- Partnership within the ecosystem

Military Credentials

- TRT: development of a military digital radio modem with frequency hopping
- Thales: integration of the TETRA vocoder
- Past clearances: *Secret Défense* and NATO security clearance

Common features of the technological building blocks

- Proprietary technologies with high TRL (Technology Readiness Level)
- Operate locally (no cloud dependency)
- Real-time performance
- Low computational requirements
- Can operate independently or in synergy
- Simple and intuitive interfaces
- Technologies adaptable to specific needs or use cases (customization options available)
- ITAR-free technology
- Technology demonstrations available upon request

Integration options

- Locally or on a server
- In a Docker container
- Cross-platform support (all major operating systems)
- Compatible with ARM processors (easily integrable into any hardware, e.g., digital radios)
- Runs on embedded processors (no need for GPU cards)

Definition

Advanced real-time voice analysis that identifies cloned or falsified voices to reinforce communication security, protect against voice impersonation, and counter disinformation attempts.

Value Proposition

Our voice deepfake detection tool analyzes audio files to determine whether a person's voice has been artificially generated.

Innovation / Competitive Advantages

- eal-time or offline detection
- Works without any prior reference (training) to the imitated voice, in full GDPR compliance
- Multilingual: works in any language

Technical Specifications

- Detection latency: 1 second
- High performance:
  - 99% at 16 kHz
  - Sensitivity beyond the human perceptual threshold (detects artifacts that the human ear does not identify as suspicious)
  - Detects synthetic latent characteristics (subtle patterns typical of artificially generated voices using Text-to-Speech or Speech-to-Speech systems)
- Recommended audio format:
  - Sampling rate ideally ≥ 11 kHz
  - The system can also operate at 8 kHz
- Low resource consumption: 15% of an ARM processor at 2.4 GHz

KPI

A voice deepfake detection tool was specially developed for a French TV channel to secure the 2022 presidential elections by detecting vocal identity impersonation. It operates in real time and requires no reference voice.

TRL (Technology Readiness Level) : 7

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