Future present of technology

Connectivity · Intelligence · Security

Gradiant Voice

Speaker recognition technology

Gradiant Voice integrates the latest Gradiant's speaker recognition technology designed for automatic user verification through the phone line

Voice biometrics is a verification technology that naturally engages with call centers. Gradiant Voice enables a convenient and frictionless method of authenticating your customers through the telephone, while reducing call times and agent's costs:

- ✓ **Gradiant Voice comprises a set of libraries ready for integration** in server platforms, mobile devices or a combination of both
- ✓ **Fully automatic speaker recognition** with just a few seconds of speech
- ✓ **Text-dependent and text-independent speaker recognition** are supported

Functionalities

A. Voice activity detection

- ✓ Fast algorithm to detect and discard silence segments

B. Voice template extraction module

- ✓ Voice template extraction from a few seconds of speech
- ✓ Speech quality assessment to ensure that the acquired speech meets the requirement for system security

C. Verification module

- ✓ 1:1 biometric template matching

Requirements

OS: Linux 64 bits (recommended Ubuntu 16.04).

Programming language: Java API

Hardware Requirements: Intel x64 architecture.

Performance

Recognition rates

Call Center Database (phone line)

- ✓ EER = 2.49%

Sizes

- ✓ Installed library size: 21.3 MB
- ✓ Template size: ~470 KB

Times

- ✓ For a reference server:
  - CPU: Intel(R) Core(™) i7 - 4790S @ 3.20 GHz
  - RAM: 16 Gbytes.
- ✓ Required audio sequence (seconds)

	Enrolment	Verification
Text dependent	8-10 s	1-2 s
Text independent	15-20 s	4-5 s

- ✓ Template extraction time (for 15 seconds of audio): 120 ms
- ✓ Verification time (for 4 seconds of audio): 50 ms

Package

Developer SDK for integration and deployment

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