

BATVOX is an advanced 1:1 Voice Biometrics tool designed for forensic experts and scientific police to perform speaker verification and compile expert reports as evidence in court.

## **KEY BENEFITS**

Based on the brand new iVector algorithm, BATVOX uses AGNITIO's 4th generation technology and achieves the fastest and most accurate results ever, providing channel, text and language independent scores and the best accuracy for very short utterances.

- New way to compute Likelihood Ratios (LR) based on the Bayesian Networks approach, thus dramatically reducing discrimination and calibration losses
- BATVOX gives a graphic representation of the LR. A LR shows that it is the X (=LR) times more likely that the test and the suspects are the same person than they are not
- BATVOX allows creation of target models, providing an automatic, accurate speaker separation technology
- High precision, thanks to Reference Populations and Impostors (for normalization and Likelihood Ratio calculation purposes) – quality measures and detection of outliers are automatically provided
- Creation of reports to present results to court
- Proven in the most demanding and challenging environments (de facto standard Voice Biometrics forensic tool in more than 35 countries worldwide), works even with low quality speech signals
- Only 7s of net speech are needed to perform identification, and 30s to create a speaker model
- Small model size: under 10kB (smallest in the marketplace)

## What is BATVOX?

## **FEATURES**

## 1] Case management

BATVOX allows the organization of both audio and model, by case and session, in which one or more calculations can be run, thus facilitating the investigation.

## 2] Speaker Identification (SID)

BATVOX allows the identification of unknown voices against voices coming from known speakers, as well as identity verification of a speaker making 1:1 comparisons, independently of text, channel and language.

BATVOX provides detailed speaker verifications with Likelihood Ratios (LR) computation based on Bayesian Networks. The LR gives a robust estimation of the verification task, in a probabilistic way, which can be easily presented and justified in legal processes, always with the support of an expert.

The calculation process can be exported to an HTML file to be presented in court.

## 3] BATVOX, 2 solutions

- BATVOX Basic: a single-user standalone solution for forensic experts based on a single machine.
- BATVOX Pro: a multi-user and distributed solution,
  Client-Server ideally suited for larger organizations and
  laboratories, managing a central database, interconnected
  with users' Client PCs through a local network.



#### **FUNCTIONS**

- Case management
- Speaker Identification (SID)
- Expert report creation

#### **USE CASES**

• Forensic laboratories: world class expert tool for identifying unknown voice samples against recorded voices of known suspects.

#### **BENEFITS**

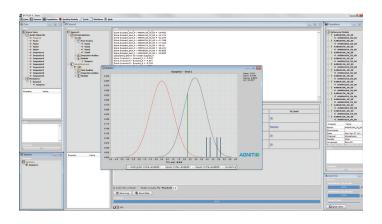
- Provides an additional biometric tool to perform speaker verification to surpass and challenge traditional barriers of cross channel and cross languages.
- · Increases strength of the conclusion combining automatic speaker identification with the classical phonetic-acoustic method ('hybrid approach').
- Certainty of identification within a closed list of suspects to pursue case investigation, providing the precision and reliability required in court hearings.

BATVOX is an expert forensic tool, fast, transparent and easy to use. A complete solution to give full support to specialists' investigation work.

### **BATSchool**

BATSchool is a complete certification program that includes, among other benefits, access to:

- Different levels of certification on BATVOX are available: Basic, Advanced and Expert.
- Personalized tutoring
- Annual International Workshop
- BATVOX User Community



# **AGNITIO - Leading Voice Biometric Technology** for Homeland Security:

Recent independent tests conducted by International Biometric Group (IBG) demonstrated AGNITIO's superior voice biometric technology capabilities.

"AGNITIO identified the correct voice within the top 2 results 99.02% of the time using 60 seconds of audio in a cross channel environment"

## International Biometric Group Research Consulting Integration



**AGNITIO** won numerous awards including Global Security Challenge (2011) and Speech Technology Market winner award (2012).

AGNITIO's Voice Biometrics consultants are available to provide all the necessary expertise and support to our clients worldwide in order to ensure the best results: consulting services include Voice Biometrics workshops, advanced training for users and system integrators, and best practices (please contact info@agnitio-corp.com).

