# Nuance Forensics: Prosecute criminals using their voice.

Prosecute successfully with compelling and reliable voice biometric evidence.

Nuance Forensics biometric solution provides forensic examiners and investigators with the ability to accurately verify an individual's identity with an audio recording. The system generates speaker voice models from a known suspect and compares it with an unknown sample to produce a statistical/probabilistic result that can be presented in Court.

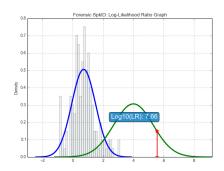
Using advanced statistical measures including Log Likelihood Ratios and Tippett Plots, Nuance Forensics ensures accuracy of identification and normalizes for audio quality and variability. Multi-language support and pre-defined reference populations segmented by dialect, gender and language expand the software's applicability to assist in a wide range of investigations and prosecutions.

Nuance Forensics is delivered as a stand-alone solution that can work as a single user system to be installed in a laptop/PC or in a server to support a multi-user architecture and be accessed remotely thanks to its Web based Graphical User Interface. It also provides the capability to manage and create specific Reference Populations and evaluate its performance, enabling high precision results.

### **Key features**

# Deep Neural Network based Voice Biometrics

Nuance voice biometric algorithms have been used to protect security-critical applications since 2001. In 2015, Nuance released the industry's first voice biometric



algorithms powered by deep neural networks (DNN), a computer learning technology that enables a quantum leap in performance. Nuance Forensics is embedding the third generation of its DNN-based voice biometric algorithms, setting a new industry benchmark in voice biometric performance.

# Flexible architecture

Nuance Forensics utilizes a clientserver architecture that can be run on a single laptop or PC and as a server-based solution that can

### **Key benefits**

- Assist successful prosecutions. Produce compelling and reliable evidence in court by submitting proven forensic and scientific voice biometric identification of alleged criminals and terrorists.
- Optimize your resources.
   Nuance Forensics allow you to obtain results faster, being able to analyze dozens of audio files within minutes and work in totally unknown languages.
- Forensic grade accuracy.
   Nuance delivers market leading, state of the art technology that is proven in the most challenging environments. Together with the advanced management of Reference Populations, quality measurements and support tools, Nuance Forensics provide unparalleled levels of accuracy.
- The Forensic Voice Biometrics "de facto" standard. Nuance Forensics in the results of more than 15 years of work of the Nuance Team in the forensic field and takes the experience of more than 100 deployments in more than 40 Countries worldwide.



be accessed by multiple users connected the same network. This makes easy sharing of audio files, suspect models and reference populations across the team.

# Reference populations management

Create and manage Reference populations (a representative set of voice samples with common features such as gender, language, channel, etc.) in order to optimize the performance of the system to the specific characteristics of each case. Nuance provides 70 built-in reference populations to make it easier to start working with new languages or characteristics.

### Measure the system's performance in real conditions

Nuance Forensics, together with Evaluation Studio, allows Forensic experts to generate performance

graphs (tippet plots, DET curves) using real life data to better understand the behavior of the system for every case.

### System checks to ensure quality results

The system quickly and accurately checks calibration similarity, audio quality, enrollment segment consistency and reference population consistency to ensure the quality of your forensic analysis.

# Part of the family of Nuance **Security products**

This allows an easy interoperability with other products such as Nuance Identifier and FraudMiner and have them all installed in a single Platform and deployment. The Nuance Security Suite is also fully interoperable with the rest of the products of the Nuance Public Security portfolio.

### Nuance public security solutions

Nuance is the global leader in Voice Biometrics and Security Solutions for Public Security with a comprehensive portfolio of products designed to cover all the needs of Law Enforcement, Intelligence and Military Agencies providing Forensic, Criminal ID and Audio Mining capabilities. Nuance's products allow full interoperability between Organizations and provide more than 15 years of unrivaled experience in delivering successful voice biometrics solutions that enable Agencies to build a safer world.

For more information about Nuance omni-channel solutions, go to https://www.nuance.com/omnichannel-customer-engagement.html









### **About Nuance Communications, Inc.**

Nuance Enterprise is reinventing the relationship between enterprises and consumers through customer engagement solutions powered by artificial intelligence. We aim to be the market leading provider of intelligent self- and assistedservice solutions delivered to large enterprises around the world. These solutions are differentiated by speech, voice biometrics, virtual assistant, web chat and cognitive technologies; enabling cross-channel customer service for IVR, mobile and web, Inbound and Outbound; and magnified by the design and development skill of a global professional services team. We serve Fortune 2500 companies across the globe with a mix of direct and channel partner selling models.

