





The extraction of biological markers in low SNR environments

Yobe's CAFE with Biometrics software product is an intelligent, biometrics integrated, conversational audio front end. It enables organizations to extract the maximum benefit from voice, including speaker identification -- for speech recognition, voice analytics, and more.

Audio Front Ends (AFE's) traditionally focus on standard audio problems like signal cleanup and standard audio solutions like noise cancellation. Yobe's CAFE (Conversational Audio Front End) with Biometrics software product is different from typical AFE's and voice biometrics solutions. It's an adaptive, biometrics integrated, conversationally focused, audio front end that strives to preserve linguistic and biological markers found in voice signals, enabling more effective speaker identification using voice biometrics characteristics.

Based on Yobe's CAFE product, CAFE with Biometrics is an expanded, biometrics integrated product offering. CAFE with Biometrics is a proprietary, on-the-edge, artificial intelligence engine that effectively listens for voice, and identifies speakers in a text-independent fashion - in complicated audio settings with challenging signal-to-noise ratios (SNRs), at a level of performance and scalability not previously seen. Through its improved signal and advanced insights – for applications and devices, CAFE with Biometrics enables organizations to extract the maximum business and customer benefit from voice, including speaker identification -- for speech recognition, voice analytics, and more.

Low SNR Effective

Raises SNR levels as low as -20 db to positive territory while preserving critical voice data for speaker identification with low error rates

Low Enrollment Barrier

Three easy utterances to enroll a user's unique biomarkers

WW & ASR Agnostic

Does not introduce unnatural artifacts that adversely affect speaker identification, ASR, and other voice analytics platforms

Text Independent

Speaker identification does not depend on the specific words spoken (no passphrase needed)

Edge Compatible

Operates 100% on the edge with no need for Internet or cloud computing

Wind Noise Adaptive

Allows accurate voice capture in outdoor and environmentally challenging scenarios

CAFE with Biometrics gives device manufacturers, application developers, brands, and speech partners the ability to deliver better business outcomes and customer experiences across a wide range of industries and use cases, including mobile phones, smart speakers, smart appliances, in-cabin use in cars and other vehicles, retail kiosks, industrial applications, security, wearables, and other applications.



The advantage needed for your voice platform to identify speakers in the real world



CAFE preserves the voice metadata needed for accurate speech and speaker recognition. This enables businesses and brands to harness the full power of voice-enabled platforms in real-world acoustic environments.

Focus on the voice, not the noise

CAFE with Biometrics isolates the voice of interest and lowers the noise level while retaining key biomarkers, for speaker identification with low error rates, enabling your business to focus on the audio and outcomes that matter most.

Intelligent listening and speaker identification, on the edge

CAFE with Biometrics intelligently listens and identifies speakers, distinguishing between simultaneous audio sources. CAFE with Biometrics is a library that runs on the edge - without requiring an internet connection or cloud based computing, and can operate on a variety of hardware platforms and operating environments.

The right answer for your use case

CAFE with Biometrics has different solutions based on your voice use case. As a device-agnostic software-first platform the only real question is how many microphones will we have access to (two vs. more than two).

