AI-powered audio fingerprinting technology for broadcast monitoring

SoundID^AI

- AI-POWERED AUDIO FINGERPRINT ALGORITHM
- AUTOMATIC AUDIO CONTENT RECOGNITION
- BROADCAST MONITORING
- PLAYLIST CONSOLIDATION

SoundID^AI is a powerful automatic audio content recognition (ACR) platform specially designed for broadcast monitoring.

This professional solution provides broadcasters, advertisers, artists, regulators, and monitoring agencies with the appropriate technology to automatically analyze broadcast channels continuously and seamlessly, even when the searched content is played in the background. **SoundID^AI** provides a complete, continuous, and time-stamped report for every broadcast of each of the sounds you want to track (*music, ads, podcasts, jingles...*), on any live channel we capture and analyze (*TV, FM, AM, DAB+, HD Radio, web,...*), or any offline content supplied (*podcasts, films, shows, videos...*) supporting now scale-out technologies to handle tens of thousands of sources in parallel.

what our customers say:

" We consider **SoundID** a very proficient sound fingerprinting and stream analysis technology which addresses advanced applications able to fully satisfy our needs, paving the way for multiple business opportunities ! "

FROM « SoundID » TO « SoundID^AI »

By developing our own audio fingerprinting algorithm for **SoundID**, we had already met the great challenge of achieving an accuracy rate of 99+% while our competitors only reached <93.2% in ideal (noise-free) conditions.

We were already able to analyze hundreds of reasonably good quality audio streams in real-time, based on a reference library that could reach hundreds of thousands of sounds.

Facing the huge daily growing number of sounds to be recognized, the need to analyze an increasing number of broadcast feeds, but also to completely remove the signal quality constraints, we have decided to entirely redesign our solution in order to onboard the latest technologies to develop and deliver our own new AI (Artificial Intelligence) audio fingerprinting algorithm. We created an algorithm that not only crushes the numbers but is also highly tolerant to noise authorizing searches for foreground or background play.

To reach this extent, **SoundID^AI** has been trained to match an audio sound even when noise is applied in front of the original sample with a higher volume level.

Therefore, it can distinguish between disturbances and the actual audio to be recognized. After millions of training iterations, its neural network is capable of recognizing audio samples even when the noise is so strong that humans are no able to recognize the original audio.
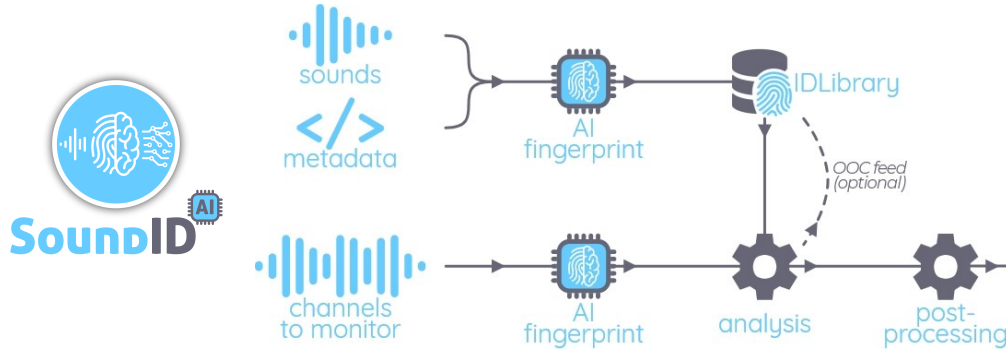
Thus, the new **SoundID^AI** exploits the latest AI capabilities with outstanding performance to handle tons of sound samples per second and remove all technical constraints encountered before.

OPNS
TRUE SOLUTIONS FOR REAL CHALLENGES

DigiPlan · CastLan · AudioSpy · RadioSpy · SoundID^AI

broadcast.opns.net

A COMPREHENSIVE AND VIRTUALLY UNLIMITED SOLUTION

Our innovative approach aims to provide broadcast professionals with technology **capable of recognizing all sounds, of any duration even when they are played in the background** or mixed with another in any multimedia source, like for music in podcasts, songs in TV shows or interviews, or any copyrighted media used in a broadcast channel.
Furthermore, the new **AI** version of **SoundID** is now **able to analyze tens of thousands of live media channels** based on a constantly growing reference library.

This second generation of **SoundID** gives access to our customers, on top of their own library, to probably **the largest musical fingerprint database in the world**, with references to **more than 90 million audio tracks**, and thousands of new titles every week.

SoundID^{AI} TECHNOLOGY WORKFLOW

SoundID^{AI}

sounds
`</>` metadata

channels to monitor

AI fingerprint

AI fingerprint

IDLibrary

OOC feed (optional)

analysis

post-processing

BROADCAST CERTIFICATION
broadcast confirmation, playlist of recognized elements, Speech/Music segmentation...

COMPETITIVE DISCOVERY
lists of unknown recurring items discovered in broadcast streams (**O**ut **O**f **C**atalog)

STATISTICS & REPORTING
multi-criteria analysis on recognized elements (artist, customer, year, language,...)

QUOTA VALIDATION
for control authorities based on recognized items metadata and based on integrated speech/music analysis

DEDUPLICATION
detect duplicates & clean up the content of your sound base / MAM

AUDIENCE MEASUREMENT
accurate results and ease of use for the panel members compared to the current manual declaration

...

KEY FEATURES

♦ **Automatic and continuous audio analysis of radio, TV, podcasts, video,...**
♦ **Recognition of sounds known in the database & indexing of repeated unknown sounds (OOC)**
♦ **Noise-tolerant algorithm to recognize the sounds played in the background**
♦ **Virtually unlimited number of input channels**
♦ **Music database of tens of millions of fingerprints available**
♦ **Support for your own audio content: music, ads, podcasts, videos,...**
♦ **Custom metadata for the content to be detected**
♦ **Do not require any prior watermarking or pre-processing**
♦ **No need to retroactively scan when new material arrives**
♦ **Automatic playlist generation from analyzed streams**
♦ **Fully customizable reporting with filters based on your needs**
♦ **REST API and Web UI provided ; OEM / white label / API only mode available**
♦ **Available on-premises or as SaaS subscription**
♦ **Developed in close collaboration with NVIDIA to ensure the best use of the latest generation GPU available**
♦ **Optimal use of hardware resources (CPU/GPU) according to the pipeline processes**

OUR AI SOLUTION IS POWERED BY

NVIDIA.

WHO IS SoundID^{AI} DESIGNED FOR ?

To accomplish their mission of monitoring the media or all modern types of broadcasts, the **regulatory companies or the associations for the protection of the author, composer and publisher rights** must benefit from a technology ensuring their artists the broadest coverage and the highest reliability in the reporting of the use of their creations.

On the other hand, **broadcasters, podcasters, and all platforms making content available on-air or online** may be required to declare each use of a sound covered by copyright, precisely what they are now able to do thanks to **SoundID**^{AI}.

Moreover, **artists, musicians, and all kinds of designers of audio or video creative content** benefit from comprehensive reports with increased accuracy and coverage to ensure they receive their fair share of royalties.

SoundID^{AI}, available on-premises or as SaaS subscription is then available and affordable for all business use cases including the support of young artists able to interact directly with our online platform to track the broadcastings of their first songs.

Lastly, **the advertising sector** is not to be outdone, since it can equally benefit from yet unequaled precision which makes it possible to confirm any broadcast of the thousands of fresh contents typically produced and broadcast daily on a virtually unlimited number of channels. **SoundID**^{AI} facilitates visual and audio proofing of broadcast content as well as competitive ads analysis to increase ad sales.

SoundID^{AI}, a member of the OPNS Broadcast product family

PLAN. BROADCAST. MONITOR. ANALYZE.