

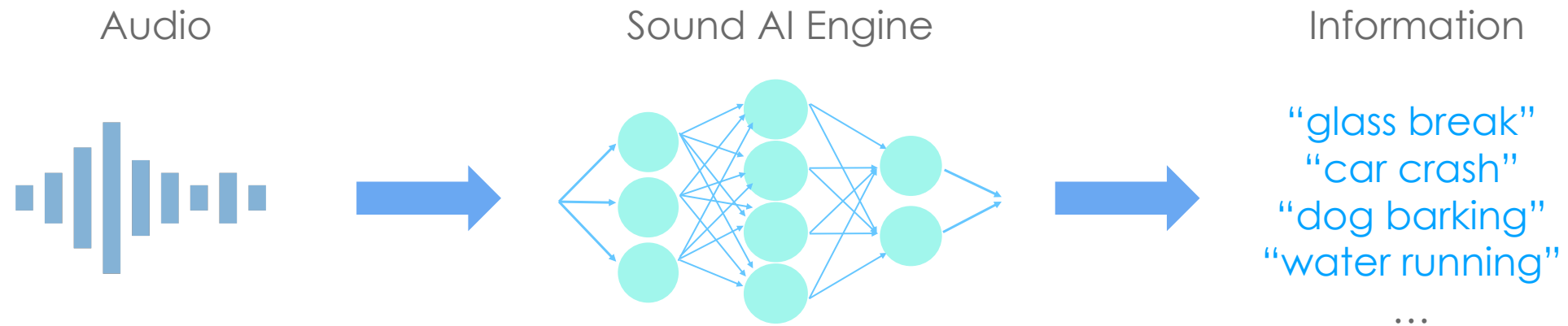


AI for Sound:
Future Technology for Smart Cities

3003 N First St, San Jose, US
www.cochl.ai

Pioneering sound AI technology

Cochl provides fully deep learning-based, top-quality sound AI platform that continuously evolves and can be easily deployed anywhere.



Award-winning technology



Sound AI challenge (DCASE)
back-to-back winner '17 '18



NVIDIA Inception Award Top4

Cochl.Sense Emergency Detection



smoke alarm



glass break



scream/
yelling



siren



gunshot



car crash/
tire squeal

Officially supported platform as of April 2022



Full list of supported sounds

Emergency Detection

fire alarm
glass break
scream
siren
gunshot
car crash

Human-machine interaction

clap
finger snap
knock
whisper
whistle

Human status

cough
sneeze
laughter
sigh
snoring
yawn
hiccup
burp

Indoor behaviors

baby cry
dog bark
keyboard/mouse
dining tools
electric shaver
water running
toilet flush

Autonomous vehicle

car horn
glass break
siren
reversing beep
car crash

Custom sounds available: Request for sounds not on the list

Smart city applications

Public safety

Monitor emergencies in the public areas – **less crowded** areas at **night**, high crime areas



Traffic analysis & video search

Detect car accidents and easily **find critical footages** like car crash and skid noise



Perimeter security

Enhance perimeter security in the **understaffed** areas or **after-hour** by monitoring if someone is approaching

Monitoring critical assets

Protect critical infrastructure from **theft, vandalism & trespassing** where human operators are absent

Technical advantages



Easy integration

Integrate with [any devices or software](#) within hours. Off-the-shelf plugins supported for popular platforms



Large coverage

Microphones can cover [larger](#) areas with no [blindspots](#), whereas cameras have limited coverage and degraded vision at night



Reliable performance

[93%](#) F1-score evaluated by IEEE in a real-world environment, Robust against [background noise](#)

1. Easy integration

Automated detection of crimes and disorders
-- Integrate with any devices & apps

Gun violence



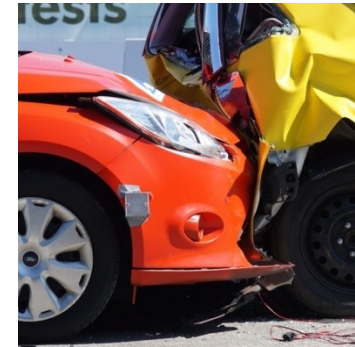
Car break-in



Violent crimes



Car accidents



Cameras



Dashcams



Network speaker

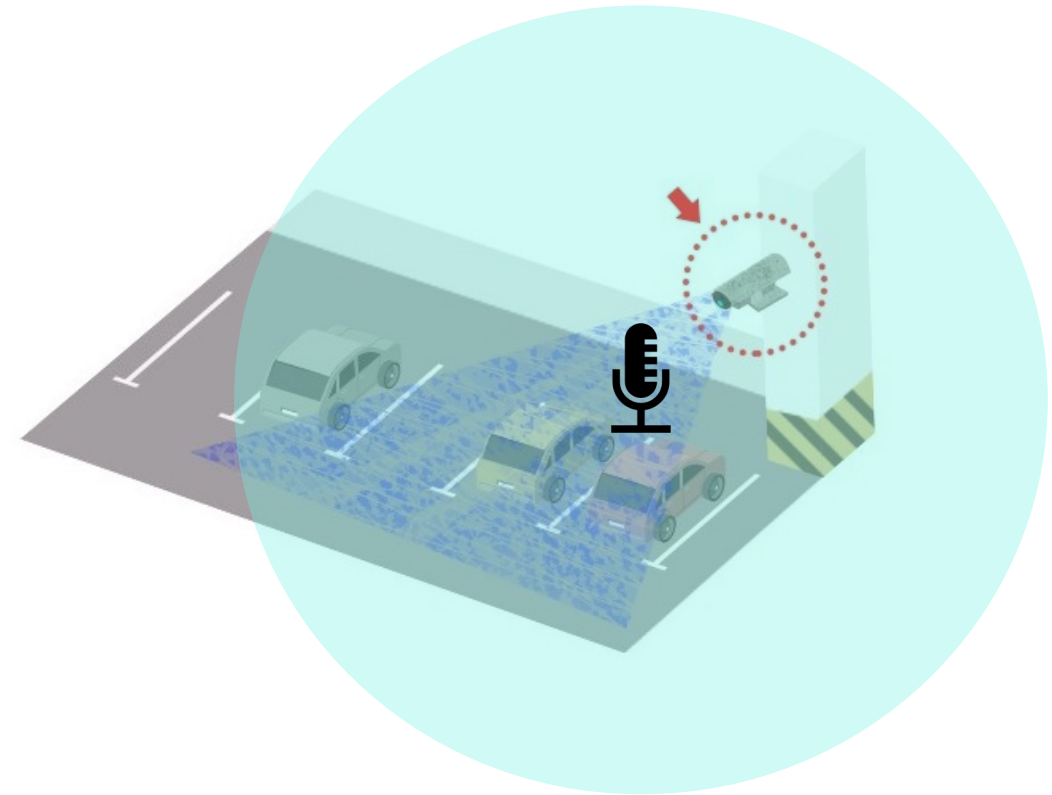


Video mgmt systems

2. Large coverage

Single microphone can cover **far-off** areas

- Save **cost** for having multiple devices
- Enable real-time crime and safety alerts
- Improve CCTV **perimeter** security



3. Reliable performance

- Highly accurate & Scalable

93% accuracy (F1-score) evaluated by IEEE

Robust against ambient noise & consistent performance

Independent of microphone type and recording environment

Capable of adding custom sounds delivered in weeks of time

Award-winning technology



DCASE
2017/2018



NVIDIA
Inception Award



18 patents
Domestic & international

Innovate with CochI --
Partner with us to expand your business and research.

Integration

Integrate CochI solution with your existing devices and mobile apps, or use as stand-alone solution

Joint R&D

Cooperative projects where CochI sound analytics can add value

Customized project

Build customized AI solution specific for your environment

Distribution

Resell CochI solution to offer next-gen AI technology for your clients

Thank you



Creating ears for intelligence

[Official website](#)

[LinkedIn page](#)

[YouTube demo videos](#)