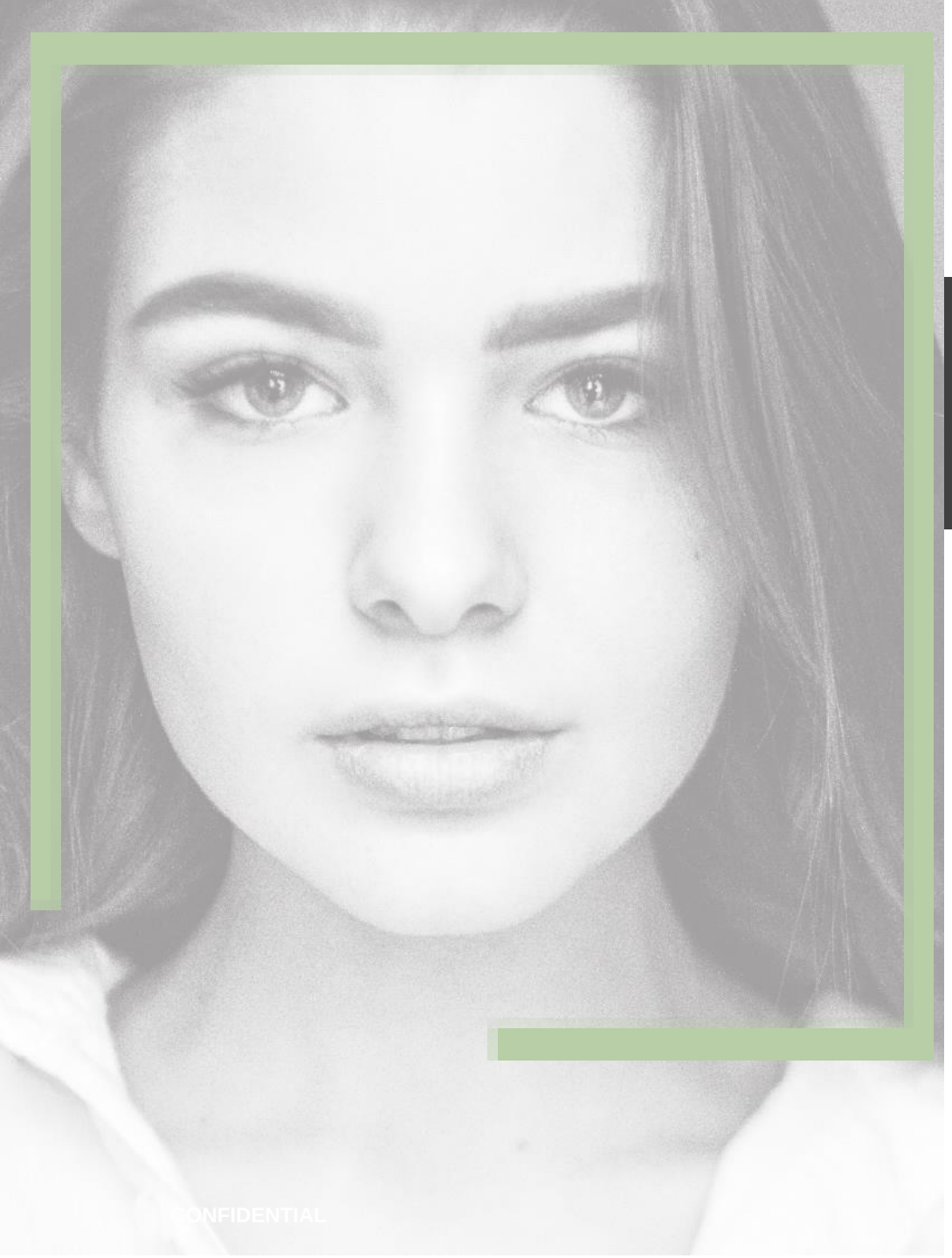


ABOUT REALNETWORKS

14 Global Offices – 25 Years Experience

1995	1997	1998	2000	2002	2007	AI 2013	AI 2015	AI 2017	AI 2018	AI 2019	AI 2020
RealAudio RealPlayer	RealVideo	RealJukebox	Streaming video	Helix DNA	DVD-like recording video	RealPlayer Cloud	RealTimes	RealMediaHD Kontxt	SAFR	SAFR for Security SAFR for 5G SAFR SDKs	SAFR Inside StarSearch RealPlayer 20/20

realnetworks

A Record of Enterprise-Grade Deployments

Throughout its history, RealNetworks has worked with some of the world's top brands to deploy large-scale B2B and B2C solutions across industries and geographies

RealTimes

- 30m users in the cloud
- Algorithm trained on +50 million faces

Intercarrier messaging

- 15y operating, 100% uptime
- Handling all operators intercarrier traffic
- +2B messages per day

+30 TELECOM

+20MM SUBS

realnetworks

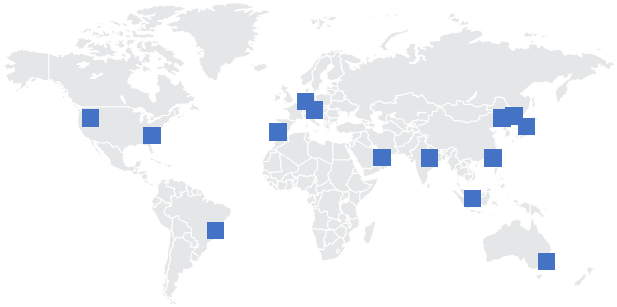
Why RealNetworks?

Fast & Accurate

Independently tested and verified to be the best performer for live video with **99.87% LFW** accuracy with recognition speed under **100ms**

US Based, Global Presence

SAFR is from RealNetworks, a US public company with a 25-year history of innovation and widely deployed solutions

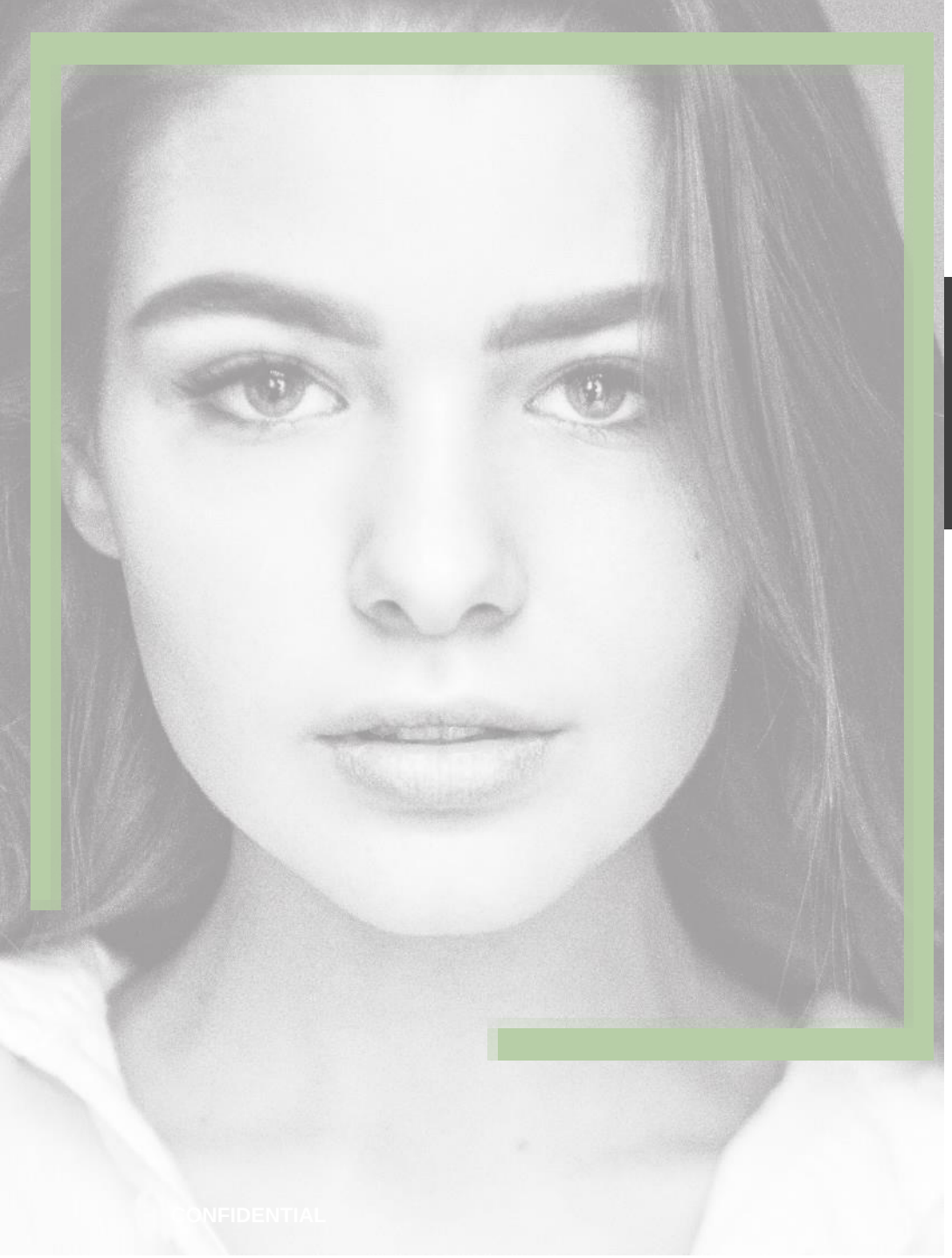


Flexibility and Low TCO

Deploy on-premise or cloud.
Use standalone or with at VMS.
Tap GPU for efficient scalability

Windows
macOS
Linux
android
iOS

realnetworks



ABOUT SAFR

SAFR®

from realnetworks

Premier Facial Recognition Solution For Live Video

99.87% Accuracy

Accuracy in Labeled Faces in the Wild

Privacy

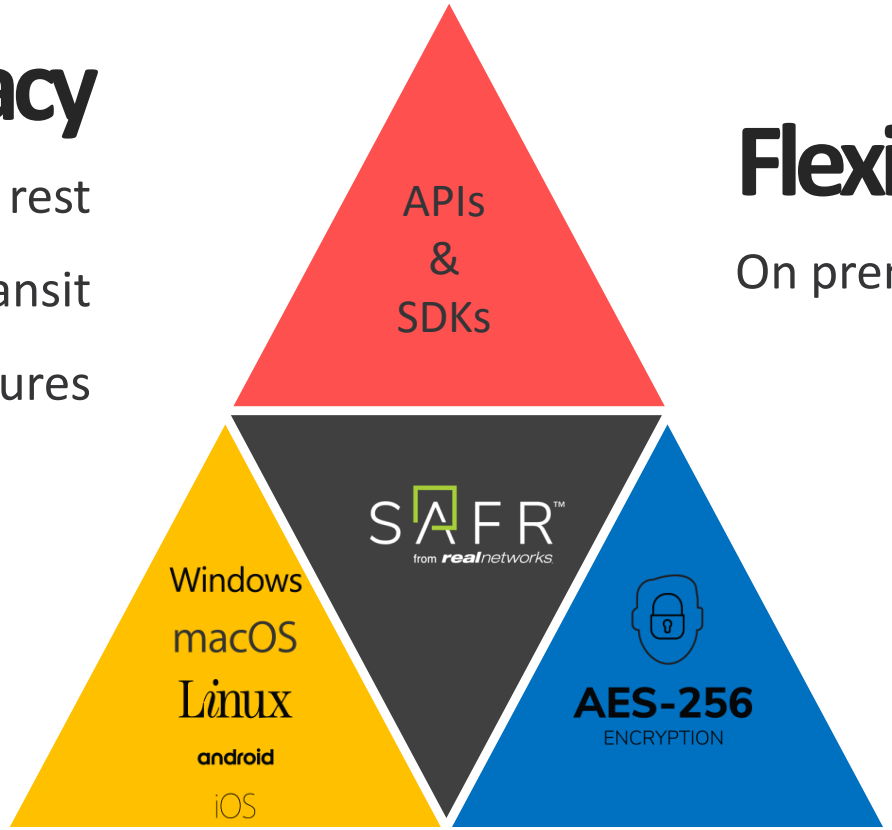
AES-256 in rest

HTTPS (TLS) in transit

Proprietary Facial Digital Signatures

< 50ms

SPEED Average Response Time



Flexible Delivery

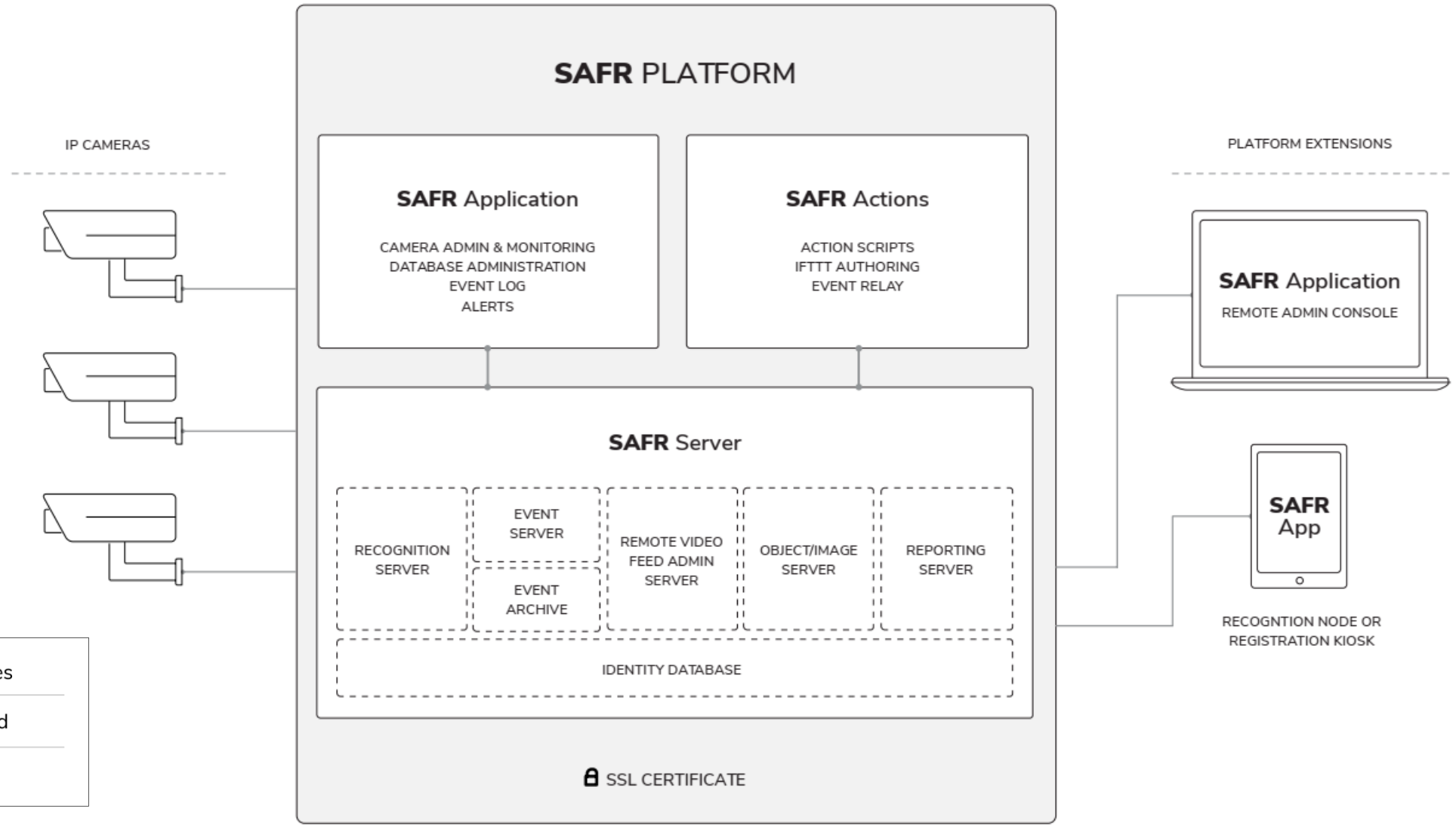
On premise, cloud & hybrid deployment

Lowest Cost

80% less computing power

NIST

SAFR Platform Basic Configuration



- On Premises
- SAFR Cloud
- Your Cloud

SAFR SDK / API

The SAFR SDK

Access the full capabilities of the SAFR system through RESTful APIs on all major platforms and operating systems.

PLATFORMS	Windows, Linux, macOS, Android, iOS, NVIDIA Jetson
FEATURES	• Detection and tracking in live video streams • Recognition and DB matching • Characterization (age, gender, sentiment) • REST APIs • Identity repository and management • Video feed management
ACCURACY	99.87% LFW, 0.0335 FNMR
DETECTION SPEED	~15-60ms @1080p and 15FPS
RECOGNITION SPEED	<100ms per face
GPU SUPPORT	NVIDIA

SAFR REST APIs

Web access to SAFR detection, recognition, and management of recognized persons and faces. Additional interfaces provide object recognition, configuration, user management, and recognition event management.

The SAFR Embedded SDK

Add high-performance face recognition and keep data secure on devices that operate completely offline.

PLATFORMS	Windows, Android, NVIDIA Jetson
FEATURES	• Image-based detection • Image-based recognition • Face signature store (+/- 10,000)
ACCURACY	99.87% LFW, 0.0335 FNMR
DETECTION SPEED	900ms @720p on a single core, 1.8GHz ARM processor
RECOGNITION SPEED	300ms @720p on a single core, 1.8GHz ARM processor
GPU SUPPORT	NVIDIA

Privacy and Data Protection

Users are given control over all PII data

(Personal Identifiable Information)

- Europe's GDPR
- California's CCPA
- Brazil's LGPD

- Recognition **doesn't store any data** of subjects in view of cameras. Biometric signatures are generated in memory only to **attempt matches** and are **immediately discarded**.
- **Demographics** can be collected with **no biometric** signature required. **Age, gender, and sentiment** are derived from the image without generating biometric signatures.
- **Customize retention** for faces and events by event type (stranger, watchlist, learned, or unrecognizable). Data is **automatically purged** by the system following configurable retention periods.

EXISTING INTEGRATIONS

Genetec

milestone

digifort

AVIGILON
a Motorola Solutions Company

wavestore
Innovation with integrity

AI Solutions
GUARDIAN SYSTEMS

AXIS COMMUNICATIONS

MOBOTIX
BeyondHumanVision

SAFR Guiding Principles

https://safr.com/the-safr-guiding-principles/

VALUE

Both Customers and the Public

ACCOUNTABLE

Sell to Trustworthy Customers

Right to life, liberty, security

DIGNITY

Ceaselessly Reduce Bias

Does not & will not recognize ethnicity

PRIVACY

Protect user data

Opt-out and be forgotten

TRUST

Independent evaluation

Bank-level encryption

Facial Recognition for Good

safr.com/facial-recognition-for-good/

Facial Recognition for School Safety

With the increased focus on school security, parents, teachers, and communities are grappling with how best to ensure safety. It's difficult to always know who's coming and going, and to streamline secure entry for the added benefit of convenience.

K-12 schools are using facial recognition for secure access — a system that requires a person to be an authorized individual (like teachers and staff) — in order to gain access to the building. This not only helps keep students safe, but also makes it easier for parents and staff to enter school grounds during non-peak hours.

Facial recognition is being used to alert staff when threats, concerns, or strangers are present on school grounds. Any number of security responses can be configured for common if-this-then-that scenarios, including initiating building lockdowns and notifying law enforcement.

Facial Recognition for Healthcare

As our population grows, so does the need for more efficient healthcare. There simply isn't time in busy physician offices for mistakes or delays. Facial recognition is revolutionizing the healthcare industry: from AI-powered screenings and diagnoses to secure access.

Healthcare professionals are using facial recognition technologies in some patient screening procedures. The technology is being used to identify changes to facial features over time, which in some cases represent symptoms of illnesses that might otherwise require extensive tests to diagnose — or worse, go unnoticed.

Facial Recognition for Disaster Response & Recovery

When first responders arrive on the scene of an emergency, they're looked to as calming forces among the chaos. There simply isn't time to waste, and seconds could spell the difference between favorable and unfavorable outcomes.

A first responder outfitted with a facial recognition bodycam could quickly scan a disaster site for matches to a database of victims. Being able to immediately know the names of the victims enables first responders to deliver more efficient care, transform outcomes, and deliver faster peace of mind to family members awaiting news of their loved ones.

In critical-care situations, knowing the blood types of each resident in a disaster zone when identified by first responders could save more lives. This application would require victims' family members to provide photos and blood type info so the emergency responders could scan the disaster area for the blood types they need.