INTERPOL

Innovation SNAPSHOTS

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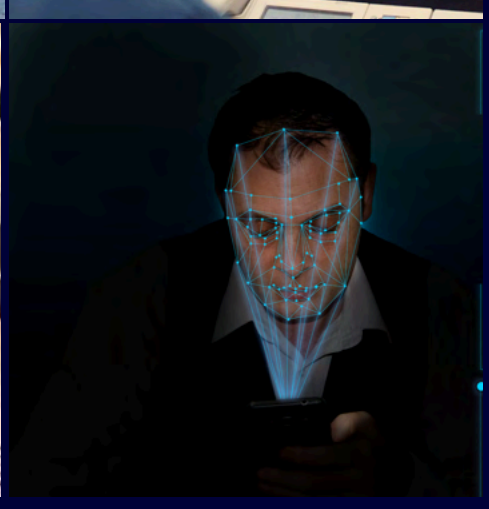

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COLLABORATIVE INNOVATION EMPOWERS SCAM REPORTING IN NEW ZEALAND

Source: New Zealand Department of Internal Affairs

A new functionality, developed through a collaboration between New Zealand's public and private sectors, enables citizens to report scam messages directly to the Department of Internal Affairs (DIA), thus enhancing efforts to prevent digital fraud.

This initiative, involving DIA, Apple, and major New Zealand telecommunications and messaging companies, simplifies the reporting process by allowing iPhone users to select "Report Junk," which automatically shares scam details with DIA. The data collected is then shared with telecommunications providers to identify, block, and disrupt criminal activity by targeting scam numbers, preventing further spread of fraudulent messages and protecting New Zealanders from financial and privacy harm. This joint effort is a powerful tool in protecting New Zealanders, strengthening the country's crime prevention efforts and empowering users in the fight against digital fraud. This feature is part of broader efforts to combat digital fraud, with plans to extend it to other devices.

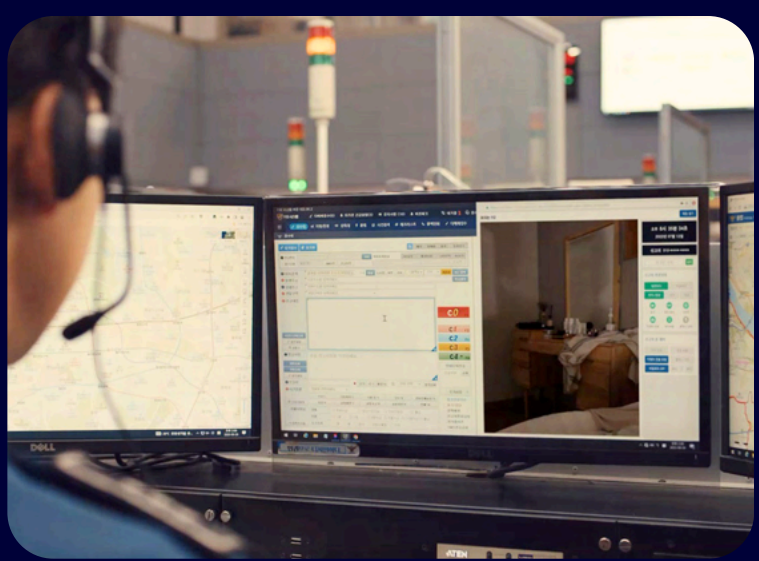
KOREAN POLICE: REAL-TIME REPORTING TECHNOLOGY TO AID VICTIMS

The Korean National Police Agency (KNPA) of South Korea breaks from the traditional voice reporting method through the implementation of 'Visible 112 System', which helps to acquire real-time video and scene location quickly and accurately via the reporter's mobile device.

When it comes to emergency call response, confirming the location of the scene and real-time situation is critical. These include situations where the victim is not able to speak on the phone due to a perpetrator's physical presence, such as domestic violence, dating violence, sexual violence, child abuse, or disaster situations that require real-time sharing of information, for instance, large fires and toxic substance leakage.

KNPA has decided to come up with a scientific solution by applying Web Real-Time Communication (WebRTC) technology to its existing emergency reporting system. WebRTC tech enables bidirectional communication of chats, voices, videos, and location information.

It took three years (2019-2021) to completely develop the system, which has been introduced to police departments across the country since 2022. A total of 21,517 cases were processed in the first year of introduction, with the scope and usage of the system rising every year.



How does the system work?

When someone makes a 112 report, a URL (requires consent of collection/utilization of personal information) is then sent to their phone. If the reporter accesses the URL address, police officers can then check the live scene footage and track the location of the reporter, enabling a faster emergency response. The system acquires the location information by using the built-in GPS device on the phone instead of location-based services provided by private telecoms, enabling a rapid and accurate location verification.

The Visible 112 System also allows the police to spectate real-time videos, chat (both verbally and via text), control the reporter's phone remotely, and offers a 'secret mode', which conceals the reporter's phone screen so that the perpetrator will not notice it.

Use Cases

- Knock knock campaign: When the reporter is unable to speak, he or she repeatedly 'knocks' (taps) on the number button on their phone, which the police will verify as an emergency situation and connect to the Visible 112 System if necessary.
- A victim locked up in a room by a perpetrator made a 112 report and said, "Hey sis, long time no see, where are you going?" on the phone. The operator of 112 Integrated Situation Room assessed the call as a rescue request from the crime situation and used the Visible 112 System to arrest the perpetrator.
- An individual was paralyzed due to chronic illness while walking in the park. The Visible 112 System helped emergency responders to quickly locate and rescue him.
- A witness of an illegal drug consumption made a report through the Visible 112 System through whispering. The report enabled case processing for the incident.

Sources: Inspector Jeong Jae-min, Korean National Police Agency ; Campaign Brief Asia.

VACANCY NOTICE

Our INTERPOL Responsible AI Lab is hiring an Innovation and Technology Officer!

Requirements

- A degree in a relevant field such as AI or Computer Science, or at least 10 years of experience in law enforcement in lieu of a formal university qualification.
- Minimum three years' experience in a law enforcement organization/agency or a security related field.
- Professional fluency in English. Knowledge of another INTERPOL official language would be an asset (French, Spanish and/or Arabic).

DEADLINE: 27 February 2025

Please click here to view the complete job vacancy description (refer to the PDF version).

UTTAR PRADESH POLICE'S CRIME GPT TOOL

The Government of Uttar Pradesh in India has collaborated with Staqu Technologies, an AI implementation company, to launch an AI tool called Crime GPT. This technology is designed to aid in crime investigation by providing rapid insights into data such as CCTV footage. Crime GPT offers a range of features such as facial recognition, voice analysis, and criminal gang profiling. This tool extends beyond traditional search functions, which allows law enforcement officers to inquire about an individual's criminal history.

The technology behind Crime GPT is based on machine learning algorithms that can analyze large amounts of data, including images, audio, and video footage. The tool's facial recognition feature uses deep learning algorithms to identify individuals, while the speaker identification feature uses audio analysis to identify speakers. The tool's voice analysis feature uses natural language processing to analyze voice patterns, and the criminal gang profiling feature uses data analytics to identify patterns and connections between individuals.

The collaboration between Staqu and the Uttar Pradesh Police has resulted in a repository of over 900,000 criminal records, which will aid ongoing criminal investigations. The Crime GPT tool uses advanced AI algorithms to analyze data and provide insights, making it an asset for law enforcement agencies. The tool's ability to provide rapid insights into data will enable law enforcement agencies to respond more effectively to criminal activities, expedite information retrieval, streamline procedural formalities, and accelerate case resolutions.

Sources: *Business Today*; *AI News*.

DID YOU KNOW?

The Durham Police in the United Kingdom have introduced a new digital solution to enhance the processing of disclosures. This technology leverages automation and artificial intelligence to streamline the disclosure process under Clare's Law, also known as the Domestic Violence Disclosure Scheme. This law gives people the right to know if their current or ex-partner has had any previous history of registered violence or abuse. The technology automates each stage of the disclosure process, from receiving applications to generating disclosure documents and letters, thus reducing the risk of human error and duplication.

Source: Emergency Services Times.

NEW YORK POLICE PIONEER "DRONE AS FIRST RESPONDER" PROGRAMME

The New York Police Department (NYPD) recently piloted a city-wide Drone as First Responder (DFR) programme. NYPD stated that the programme uses the latest in autonomous aerial vehicle technology in order to enhance their emergency response capabilities. Currently, the DFR programme is being pioneered in five police commands spread across three of New York City's five boroughs, with two drones deployed per command.

As part of the DFR programme, drones are deployed remotely and fly autonomously to the exact geographical coordinates on the GPS system that have been flagged out by public safety alerts. The drones are deployed autonomously in response to alerts, including searches for missing people, and incidents of robberies or theft. Notably, the drones are also deployed in response to alerts triggered by the ShotSpotter gunshot detection system, which uses a network of acoustic sensors placed around key nodes in urban areas to detect the sound of gunfire. Through triangulation, the presence and location of potential gunshots is alerted to the police, along with other key information such as the number of shots fired, and the time of incident. ShotSpotter has been used by the NYPD since 2015.

In recent years, the deployment of drones as first responders has represented a significant development in modern policing, leveraging advanced technology to enhance emergency response capabilities. By utilizing drones equipped to respond to precise GPS coordinates where critical emergencies have taken place, law enforcement agencies can rapidly respond to emergency situations, often in a matter of minutes. Furthermore, first responders can have real-time access to high-definition drone video feeds directly on their mobile devices, allowing for situational assessment without endangering the lives of law enforcement officers. Some of these drones are even equipped with advanced features such as night vision and thermal imaging, which significantly enhance the ability to locate missing persons or criminal suspects in various operational scenarios.

This is not the first time that the NYPD has used drones in their operations. Since 2018, the NYPD has used drones to carry out a wide range of operations, such as 3D scanning and mapping to recreate floor plans and inspect the structural integrity of buildings and bridges, documenting traffic collision and other crime scenes, and even to monitor shark activity at New York City's beaches.

Sources: *The Guardian*; *New York City Office of the Mayor*; *Eduardo Muñoz /Reuters.*

DID YOU KNOW?

A multi-modal, real-time deepfake detection system is an example of a technology that can assist police forces in combating AI-powered real-time fraud. One such system, developed by Reality Defender, integrates biometric data and multi-factor authentication with the ability to identify synthetic (AI-generated) impersonation attempts across all media types – images, video, text, and audio – in live interactions such as phone scams, ransom calls, or video conferencing fraud. By adopting similar technology, law enforcement agencies can monitor high-risk phone lines (emergency response, ransom calls, etc.) and detect synthetic voices in real time.

Source: Biometric Update.

CHINA UNVEILS AI-POWERED POLICE ROBOT FOR PUBLIC SAFETY

China has developed a police robot known as the RT-G. This robot, developed by Logon Technology, is equipped with artificial intelligence (AI) and can make autonomous decisions for operations. The RT-G robot is designed to actively pursue and apprehend suspects, revolutionizing the way law enforcement agencies follow and find suspects and reduce the manpower required from law enforcement officers.

The RT-G robot is designed to navigate city streets, monitor surroundings for potential criminal activity, and operate in high-risk environments. It can move at a speed of 35 km/h, utilizing sensors and facial recognition software to detect and identify known criminals. Additionally, the robot can operate on land and in water and withstand four tons of impact damage, making it resistant to attempts to destroy it.

The RT-G can be equipped with a variety of non-lethal police tools, including net guns, tear gas sprayers, and sound wave dispersal devices.

Its advanced sensors enable it to detect abnormalities and unusual events within its surroundings, while its facial recognition software allows the robot to identify known criminals for enhanced security. When the RT-G detects a threat or a known criminal, it can either call for backup from other robots in the area or law enforcement officers.

The RT-G robot represents a significant milestone in the development of robotics for law enforcement and public safety and security. With its advanced capabilities and versatility, the RT-G plays a crucial role in maintaining public safety in China and supporting law enforcement agencies in their efforts to revolutionize safety and increase the efficiency of law enforcement officials.

Sources: NDTV ; The Sun.

SAVE THE DATE: UPCOMING INNOVATION CENTRE WEBINARS

25 Feb	Future-Oriented Crime Prevention Strategies Series: **The Application of Technologies for Crime Prevention in the Digital World**
26 Feb	Emerging Technologies Debriefing Series: **Quantum technologies basics**
6 Mar	3D Scanning/Mapping/Photogrammetry Series: **Introduction to 3D Scanning**
12 Mar	Data Driven Cities Series: **Empowering Emergency Services with AI and Smart Technology**
26 Mar	Emerging Technologies Debriefing Series: **Smart contracts**
27 Mar	Global Horizon Scan Series: **CRIME: Future Trends**
3 Apr	AI in DF Series: **Quality Assurance of AI Models in DF**
15 Apr	Future-Oriented Crime Prevention Strategies Series & Global Horizon Scan Series: **Law Enforcement Partnerships for Crime Prevention in the digital world**
23 Apr	Emerging Technologies Debriefing Series: **Immersive technologies**

Please contact your INTERPOL National Central Bureau for registration information.

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CALL FOR CONTRIBUTIONS

Spotlight your innovations

- Law enforcement is evolving at an unprecedented pace, fueled by technological innovations and collaborative efforts that redefine policing.
- The Innovation Snapshots newsletter captures and showcases these transformative advancements and invites you to join the conversation.
- We welcome stories from law enforcement, industry innovators, and academic researchers that showcase technologies and novel approaches to drive advancement together.

Submission Guidelines

- Keep contributions to ~400 words.
- Include relevant, high-quality photos with usage rights and credits.
- Maintain a neutral and factual tone.
- Email your contribution to IC-Snapshots@interpol.int and a brief bio of yourself or your organization.

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