INTERPOL

INNOVATION SNAPSHOTS

Volume 2 Issue 1 January 2022

THE USE OF ARTIFICIAL INTELLIGENCE IN LAW ENFORCEMENT IN JAPAN

The National Police Agency of Japan (NPA) has been exploring the possibilities and challenges of Artificial Intelligence (AI) for police activities, including investigation.

In 2019, NPA began a verification experiment of an AI system that learnt dozens of different models of vehicles and analyzed still images captured by security cameras around crime scenes. This system showed the candidate vehicles in order of likelihood to determine car models from the car images. In this test, a certain level of accuracy has been achieved. NPA is now working on expanding the number of target vehicle models to around 600 and upgrading the system so that it can extract all the detected cars in a video as still images and show a few candidate car models identified by AI in order of likelihood after a user selects the still images for further analysis.

Money laundering detection is another area where NPA is trying to make use of AI. The AI system has learnt actual money transactions, which investigators analyzed for suspicious transactions reported by financial institutions for detecting money laundering. The system analyzes the transactions and scores the risk of money laundering to suggest to investigators which ones should be paid attention to.

Read the full article here: https://www.asahi.com/ajw/articles/14421414

DID YOU KNOW?

Pakistan is using the figure of "Cyber Scouts" to promote awareness about cyber-crime in the society? They are young students trained to identify cyber-crime activities and equipped with adequate preventive knowledge to help fight it.

HOLOGRAM OF THE PERPETRATOR

The Netherlands Police have been trying to find a man who sexually abused two teenage girls in 2010. At the time, the only available source was a composition sketch, yielding no results and no DNA hits either. Eleven years later, the investigation team adopted a new, innovative technology to find the perpetrator. With the support of other departments, the investigation team created a life-like moving model representation by combining all of the available information on the perpetrator, which was presented visually in a Holobox.

As the perpetrator was on a bicycle and could have easily been seen by people around the crime scene, the Holobox was also projected onto places where the crime took place after it was first shown to the victims.

For the victims, the 3D model was initially confronting but also served as a positive healing process, allowing them to express themselves without the presence of the perpetrator whilst also letting go of anxiety suffered over the years. The victims received professional guidance during this process.

The remaining question is if this 3D model really does look like the perpetrator. This will only be known once they are caught. Until then, the Netherlands Police views this innovative solution as a great opportunity to make use of every small detail that could prove essential to the investigation and to capture the perpetrator.

This 3D animation can be seen on: http://www.politie.nl/zeden2010

INNOVATION-AS-A-SERVICE: EMPOWERING INNOVATION IN THE GLOBAL LAW ENFORCEMENT COMMUNITY

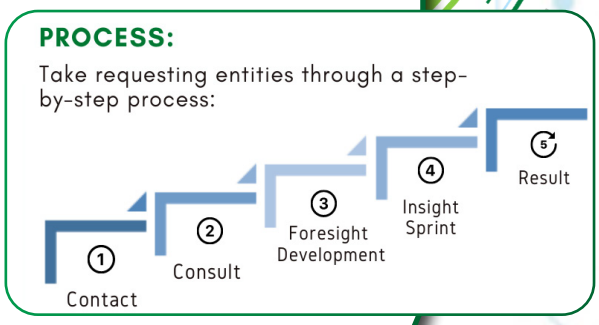
The Innovation Centre is proud to announce its latest offering, Innovation-as-a-Service (INaaS). This new initiative offers law enforcement agencies in INTERPOL member countries and INTERPOL directorates a collaborative mechanism to explore the futures of law enforcement related issues.

Through consultations, foresight development, and dedicated sessions, requesting entities will receive fresh insights and strategic recommendations on a topic of their choice to help them achieve their goals and better prepare for the future.

Innovation-as-a-Service leverages the Innovation Centre's in-house expertise and tools, like the INTERPOL Global Horizon Scan, as well as its extensive policing networks and specialist contacts. While each request will be implemented differently to meet the specific requirements of the requesting entity, INaaS generally encompasses five stages, listed in the figure below:

Innovation-as-a-Service should be thought of as a collective journey empowering the requesting entity to become better prepared for the future. This "stretching" exercise can result in subject matter expertise, out-of-the-box thinking and insights, global perspectives, new contacts, and a final report with strategic value.

Should your organization be interested in this new service, we encourage you to send a request using this survey:
https://www.research.net/r/SFFM6XY



IC VIRTUAL ROOMS

INTELLIGENCE SHARING THROUGH TAXONOMIES	CLOUD SERVICES AND DIGITAL INVESTIGATION
27 JAN	10 FEB

For more information, please contact the INTERPOL Innovation Centre (innovation@interpol.int)

HOW TO ACCESS THE INTERPOL GLOBAL KNOWLEDGE HUB

If you are a law enforcement officer, please contact your INTERPOL National Central Bureau (NCB) and refer to the INTERPOL Global Knowledge Hub Guidelines to request access to the platform.

ANDROID VIBER FORENSICS

Viber is a popular chat messaging application with a solid user base worldwide. That is why it is crucial to analyze its databases in the course of a digital forensic investigation. The Viber app is available on various mobile and computer platforms, among which one of the most popular is Android.

Most Android Viber app data can be obtained through a file system acquisition. It is also possible to manually download a specific folder containing Viber data using the Android database (ADB) backup extraction method.

In the full article for this snapshot, you will learn about:

- Location of Viber artifacts on Android-based devices
- Older and newer formats of a Viber database and differences between them
- The most important evidence to analyze during a digital forensic or an incident response investigation

You will also find out the techniques and tools that can be used to analyze Viber artifacts, even when dealing with deleted messages.

Read the full article here: https://belkasoft.com/android_viber_forensics

NAVIGATING CAR FORENSICS CAPABILITIES AND NEEDS

INTERPOL worked with 10 member countries during the Car Forensics Expert Group Meeting on 1 December 2021 to map out their level of car forensics capabilities and identify needs in this technically demanding and evolving subject area.

Participating countries assessed their needs by reflecting on questions about types of data needed, how to obtain data, and major challenges and opportunities for law enforcement. The meeting also provided a platform to discuss difficulties in obtaining information from vehicle manufacturers, lack of support in the decryption and analysis of data, legislation concerns in different countries, and having up-to-date standard operating procedures that can cope with the fast changing technologies in car forensics.

As concrete aims stemming from the expert group meeting, INTERPOL intends to create a car forensics framework in collaboration with member countries and bolster outreach to industry to increase cooperation and dialogue.

For more information, please contact DFL@interpol.int

DID YOU KNOW?

Portuguese Judiciary Police created new drones adapted for the functions they will perform in police operations, different, therefore, from the equipment available on the market.. They can be used to identify objects and people in areas of poor visibility.

ARTIFICIAL INTELLIGENCE PARTNERSHIP BETWEEN ACADEMIA AND LAW ENFORCEMENT TO HELP TACKLE ONLINE CHILD ABUSE

Artificial Intelligence continues to be an area of partnership between law enforcement and academia. For example, Anglia Ruskin University (ARU) in the UK has been commissioned to help develop AI that aims to keep children safe online. The university is working with SafeToNet to develop its SafeToWatch AI technology.

The software will block specific video content from being filmed. SafeToWatch will use a device's camera to identify inappropriate images and prevent them from being utilized. Many social media companies use encryption software that can hide whether abusive material is being sent online. SafeToWatch will be able to bypass this encryption software.

The project is supported by the British Government's Safety Tech Challenge fund to test if SafeToWatch can be effectively trained to recognize child sexual abuse material in real-time and prevent it from being created. If successful, it could be installed and used on any smart device. As part of the partnership, experts from ARU will conduct further research and analyze the data collected to improve the efficacy of the technology's AI algorithms.

Sources: Artificial Intelligence developed in Cambridgeshire will tackle online child abuse - Cambridgeshire Live (https://www.cambridge-news.co.uk/news/cambridge-news/arificial-intelligence-anglia-child-abuse-22249808)

INTERPOL
Innovation Centre
INTERPOL Global Complex for Innovation
18 Napier Road
Singapore 258510
T: +65 65503569
Email: IC-Snapshots@interpol.int