VIRTUAL REALITY EDUCATIONAL PROGRAMME USED TO TACKLE YOUTH VIOLENCE

In June 2022, the Greater Manchester Police (GMP) (England) launched a virtual reality (VR) technology programme to prevent and address crimes and violence among the youth. Developed by the Greater Manchester's Violence Reduction Unit (VRU) in collaboration with the Greater Manchester Magistrates' Association, the Violence Prevention through Virtual Education programme is set to implement virtual reality to help young people in high-violence risk situations, and particularly to avoid knife related violence. In particular the project is called Virtual_Decisions and is divided into two different programmes Virtual_Decisions_Gangs and Virtual_Decisions_Knives. These consist of two short immersive VR films that use a "choose your own path" format.

Through the use of real actors, the technology immerses the young participant in a virtual reality experience that puts them in situations where they must make decisions that might have a variety of outcomes. This allows young people to make decisions and experience peer pressure in a secure setting. Following the VR experience, a 12-week curriculum is set to reinforce the knowledge and instruments learned during the practical exercise. Elements such as awareness, attitudes, and behaviours concerning crimes and knife-related violence are elaborately addressed. With the aid of this programme, the GMP and the Violence Reduction Unit is thinking in an innovative way about how to educate young people and how to prevent violent incidents from happening in the first place.

Read more here: https://gmvru.co.uk/virtual-reality-technology-programme-used-to-tackle-youth-knife-violence-in-greater-manchester/

AUSTRALIA'S NINE TECHNOLOGY SNIFFING K9S

Nine canines have been given specialized training and have been deployed among various police stations in Australia in order to sniff digital technological items such as SIM cards, USB drives, and hard drives using their keen sense of smell. The canines have been trained to locate items used to perpetrate crimes such as child abuse or terrorism, where digital evidence may be stored and then hidden around the residence of the perpetrator or otherwise missed in a hand search. Only the top one percent of dogs who have been trained to identify drugs and explosives are selected to work as technology sniffing dogs. This is because the goods in question typically emit very little or no odour. The dogs have thus far located more than 328 items across 74 different operations, and their only compensation for their hard work is a good pat and some play time at the conclusion of each work day.

Source: https://www.abc.net.au/news/2022-06-03/afp-training-dogs-to-sniff-out-digital-technology/101122518

CLOUD-BASED INDOOR MAPPING FOR FIRST RESPONDERS

The U.S Department of Homeland Security (DHS) are funding the development of a licensed cloud-based, indoor mapping platform that will enable first responders to maintain, analyze and review 3D indoor floor plans in real-time. The Mappedin Response Platform is being developed in collaboration with company Mappedin Inc. from Waterloo, Ontario and will equip first responders and local governments with a digital "warehouse" of 3D floorplans easily accessible via desktop, tablets, or mobile devices. With this technology first responders will no longer need to rely on paper floorplans, blueprints or maps and will instead be able to conduct 360-degree assessments at their fingertips.

With the help of advanced machine learning techniques, the platform can automatically digitize existing building blueprints uploaded in either DXF, PNG or JPEG formats, converting paper-based plans into editable and customizable "digital assets". Permitted users can then customize and adjust floorplans add relevant details on-site via their desktop or tablet devices. The platform is capable of taking into account a variety of important information to better prepare first responders before arriving to the scene of an emergency, such as materials used in the construction of a building, the location of fire hydrants and the presence of hazardous materials. The platform is likewise capable of overlaying other technologies and software such as sensors that detect gunshots or the presence of life, to provide first responders with a more holistic view of different types of incidents and their surroundings.

In the development of Mappedin Response, the company worked directly with local governments and first responders across the U.S and Canada to gather feedback from across federal, state, and local levels to improve situational awareness and emergency preparedness for first responders and ultimately public safety.

Read more here: https://www.dhs.gov/science-and-technology/ news/2022/06/14/new-digital-indoor-mapping-capability-now-available-first-responders

DID YOU KNOW?

In China, an artificial intelligence video surveillance system is helping restore the biodiversity of the country's longest waterway, the Yangstze River. By detecting and preventing illegal fishing activities, the technology has helped improve the habitats of the extremely endangered 'Finless Porpoise' which can now be seen more than ever before across provinces in China.

IMPACT OF SYNTHETIC REALITY AND DEEPFAKES ON POLICE WORK

In June 2022, the Netherlands Police published a report entitled "Exploration of the Impact of Synthetic Reality & Deepfakes on Police Work", which is intended to explore current and relevant concerns regarding malicious synthetic media for law enforcement agencies (LEAs).

The report addresses the role of synthetic media, defined as media generated or manipulated with Artificial Intelligence (AI), as a potential detrimental element enhancing online crimes and disinformation. Due to the general public's increased access to synthetic media and service platforms capable of generating deep fakes, the risk of online crimes (e.g., cyberbullying, identity theft, online sexual abuse and exploitation) has increased significantly in recent years. In this context, the report addresses the current state of synthetic media in terms of developments, prevention, and detection in relation to image, audio, and text synthesis.

The report illustrates further the role of the AI lab of the Dutch Police for applied scientific research related to the possibilities of synthetic media. In addition, it presents short and medium-term opportunities currently being developed by the department. Among these, the creation of a large test database for training AI devices to aid with photo, video, and audio detection; tactical deployment of synthetic media within criminal investigations and synthetic collection of information; and the development of virtual police officers, are some of the current priorities of the Netherlands Police

For more information and full access to the report please visit the <u>INTERPOL GKH</u>

INTERPOL CONVENES GLOBAL SUMMIT ON THE USE OF DRONES

Between 20th-22nd June 2022, INTERPOL held the Drone Expert Summit in Oslo, Norway, with the participation of 50 countries, as a response to the ever-increasing threat landscape and innovation drones within the Nordic region. Furthermore, INTERPOL and the Norwegian Police launched the results of the INTERPOL Drone Countermeasure Testing in September 2021 at Oslo Gardermoen Airport.

The Summit highlighted the following areas of interest for member countries:

- A threat landscape that is evolving as criminals use drones to commit crimes and the challenges police face to address this threat.

- As a tool for law enforcement, drones are increasingly used in search and rescue, as a first responder and other emerging capabilities, as well as the new cases, sensors, and capabilities they provide for policing.

- Data recovery and investigation of drone incidents utilizing digital forensics are still relatively new areas in most member countries, so there is still a lack of expertise and knowledge associated with examining drone incidents and recovering data.

A report on INTERPOL's tests on Counter-Unmanned Aircraft System (CUAS) at Oslo Gardermoen airport was also released during the summit. When the airport was fully operational, INTERPOL and Norwegian Police tested twenty systems. Testing was conducted using the Norwegian Frequency Regulator to ensure that all systems adhered to a strict frequency operating range so as not to affect airport-specific systems.

In addition, INTERPOL is looking for more strategic insights into drones as a threat, tool, and evidence. It will work closely with member countries, regional agencies, and regional initiatives to achieve a global understanding of this specialised field.

The full report from the INTERPOL Drone Countermeasure Exercise can be downloaded _here_.

INNOVATION CENTRE EVENTS

E-DOCUMENTS AND DIGITAL CERTIFICATES FORENSICS	GAIT ANALYSIS FOR RECOGNITION AND CLASSIFICATION
21/07 ICVR	*04/08 ICVR*

3RD INTERPOL YOUNG GLOBAL POLICE LEADERS	
28/08 - 03/09 INDIA	

For more information, please contact the INTERPOL Innovation Centre

innovation@interpol.int

DID YOU KNOW?

Sending one of your childhood photos might help law enforcement in the fight against child abuse? Australian Federal Police, in collaboration with Monash University, launched a crowdsourcing campaign titled "My Picture Matters" to invite people aged 18 and above to send a picture of their childhood. The final aim is to collect images of people aged 17 and under, which will be used to train a machine-learning algorithm to detect child abuse in photographs.

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