INTERPOL Innovation Centre





ARTIFICIAL INTELLIGENCE

INTERPOL Innovation Centre's initiatives



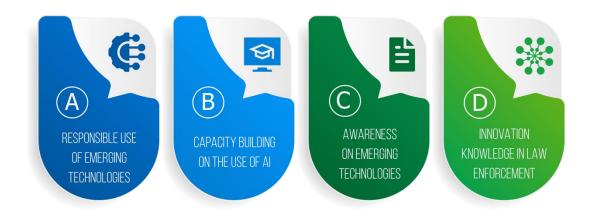
Introduction



INTERPOL has identified key areas of emerging technologies that have the most significant impact on the law enforcement landscape. This assessment has led to the selection of the INTERPOL Innovation Centre (IC)'s 9 pillars which denote technologies and strategic considerations that are most significant for innovation in law enforcement in the near future. One of the innovation pillars is Artificial Intelligence (AI) and the IC has been working towards sharing information, facilitating knowledge exchange and administering law enforcement specific trainings on AI.

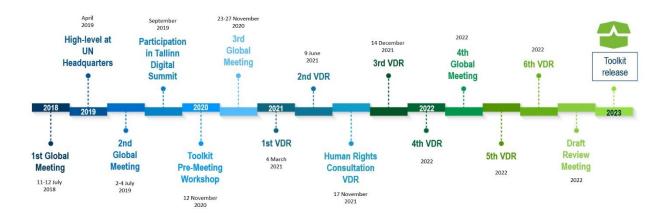
The IC's multifaceted approach on AI spans over 4 areas:

- A. Encouraging the responsible use of emerging technologies
- B. Capacity building on the use of Al
- C. Raising awareness of law enforcement agencies in INTERPOL member countries regarding emerging technologies
- D. Fostering and maintaining innovation knowledge in law enforcement





The IC brought together relevant subject matter experts from law enforcement academia, and industry from all over the world to develop offerings that can support and guide law enforcement in the design, development and deployment of emerging technologies in a responsible manner.



INTERPOL IC's collaboration with the United Nations Inter-Regional Crime and Justice Research Institute (UNICRI)'s Centre for Artificial Intelligence and Robotics commenced in July 2018 with the convention of the 1st Global Meeting on Artificial Intelligence (AI) and Robotics for Law Enforcement in Singapore. The Global Meeting was conducted with the objective of informing global law enforcement on AI and robotics to ensure that they do not fall behind with respect to these technologies. This event paved the way for sustained INTERPOL-UNICRI cooperation on AI. The meeting was followed by a high-level event on "Artificial Intelligence and Robotics: Reshaping the Future of Crime, Terrorism and Security" convened in the United Nations (UN) Headquarters by UNICRI and INTERPOL, with the support of the Permanent Missions of Georgia, the Kingdom of the Netherlands and the United Arab Emirates to the UN in April 2019. The objective of the meeting was to present the results of the 1st Global Meeting and raise awareness on the possible risks and benefits of AI and robotics for law enforcement.

This event was followed by the 2nd INTERPOL - UNICRI Global Meeting on Artificial Intelligence for Law Enforcement which was held in Singapore as a part of INTERPOL World in July 2019. During this meeting, a proposal was presented for the development of an operationally oriented toolkit to support law enforcement on AI. The 2nd Global Meeting was followed by the Tallinn Digital Summit in September 2019 where INTERPOL and UNICRI chaired a panel on "The Future of Law Enforcement and Future Crimes" and held discussions on the trustworthy use of AI by law enforcement.

Subsequently, due to the COVID-19 pandemic and associated travel restrictions, the 3rd INTERPOL-UNICRI Global Meeting on AI for Law Enforcement was held virtually in November

2020. The Global Meeting was preceded by a Pre-Meeting Workshop of AI experts to hold initial discussions on the objective, structure, target audience and key points of the Toolkit for Responsible AI Innovation in Law Enforcement (hereafter referred to as AI Toolkit). The discussions from the Pre-Meeting and the 3rd Global Meeting informed the initial framework and concept of the AI Toolkit, which aims to provide insight and support law enforcement in the design, development and deployment of AI in a responsible manner. The meetings also aided in the formation of a Core Group of experts from law enforcement, academia and private industry to support the building of the AI Toolkit and serve as a review board to refine its contents.

The Core Group (CG) has met during 3 Virtual Discussion Rooms (VDRs) hosted by INTERPOL and UNICRI over the course of 2021. Through these VDRs, the CG will explore various elements of the Toolkit and guide its development. The first VDR in this series was held on 04 March, 2021 and focused on use-cases that can be sampled for incorporation in the AI Toolkit. The second VDR took place on 09 June, 2021 and explored principles that law enforcement must follow for the responsible use of AI. The third VDR occurred on the 14 December and was dedicated to further advance the process of identifying the principles for the responsible use of AI by law enforcement by focusing on the principles of policing and examining the intersection of these, in some cases centuries old, sets of principles with the emerging sets of principles governing the use of AI.

On the 17 November, INTERPOL IC and UNICRI organized a virtual Human Rights consultation session. This session was dedicated to human rights aspects of the Toolkit. Invited representatives of selected organizations and universities were asked for input to help ensure that the key human rights considerations are reflected in the Toolkit.

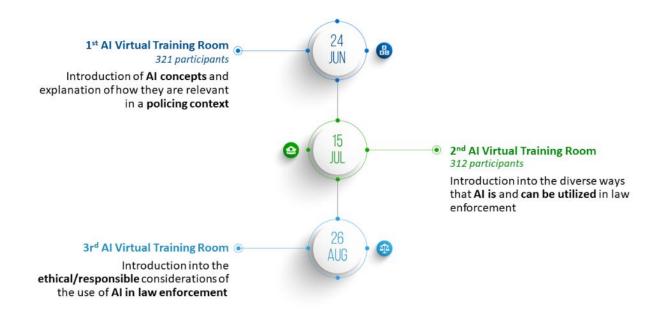
The Toolkit for the Responsible Use of AI by Law Enforcement is an important outcome of INTERPOL IC and UNICRI's efforts on AI. It is intended to be a practical, operationally oriented and easy to follow product that will consist of:

- I. Technical definitions of AI and related concepts
- II. Principles for a trustworthy, lawful and responsible use of AI in law enforcement, elaborated through
 - a. Use-cases
 - b. Requirements
 - c. Best practices
- III. Definition of the target audience and stakeholder roles
- IV. Recommendations and considerations for the responsible use of AI by law enforcement

The Toolkit will also be supported by a self-assessment questionnaire through which law enforcement agencies can check ethical AI compliance and references to state-of-the-art research for interested readers.

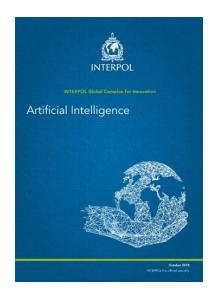


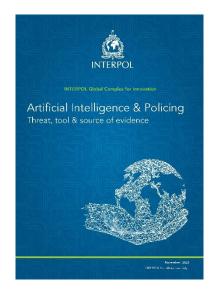
Alongside the VDRs, the IC has also been administering trainings on AI for law enforcement officials. The IC has planned a series of 3 Virtual Training Rooms (VTRs) through the year on "Introduction of AI for Law Enforcement". The first VTR, which took place on 24 June, 2021 provided a fundamental introduction of AI and related concepts to law enforcement officials of all backgrounds. The VTR dealt with definitions, history, milestones and foundational information regarding AI. The second VTR in the series took place on 15 July, 2021 and provided a focus on law enforcement use of AI. It explored law enforcement specific applications of AI through usecases and projects that exemplified how police agencies can leverage AI for their benefit. The third and last VTR in the series took take place on 26 August, 2021 and focused on the ethical considerations for the responsible use of AI in policing. An overview on the concept of the INTERPOL-UNICRI Toolkit for the Responsible Use of AI was also presented during this VTR.





Apart from hosting events, the IC has also been working towards disseminating research in the realm of AI for law enforcement. In 2018, the IC published an Innovation Report on Artificial Intelligence which elucidated recommendations on how INTERPOL can support member countries in fostering AI powered policing and combatting AI led crimes. The IC researches emerging technologies using a three-pronged approach (threat-tool-evidence paradigm), to establish how such technologies can become a threat, but also a tool and a source of evidence. In line with this method, the IC is in the process of developing a Whitepaper on AI with the objective of exploring how AI can serve as a threat, tool and instrument for the intelligent collection of evidence for law enforcement (draft in appendix at the moment in final revision at INTERPOL language services).

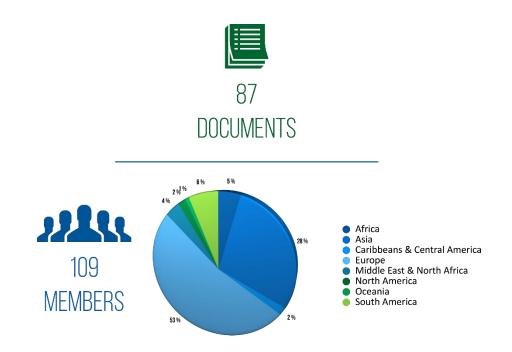




These whitepapers are products by the INTERPOL IC that aim to inform law enforcement agencies and police chiefs on AI-induced challenges of which they need to be aware, while also explaining the added-value of introducing AI to policing solutions. Through these papers, the INTERPOL IC intends to generate awareness on the growing importance of AI for law enforcement and provide insight on law enforcement specific steps that can be taken to ensure readiness in this context.



The INTERPOL Global Knowledge Hub (GKH), which houses dedicated platforms for INTERPOL focus areas and projects harbours a workspace on Artificial Intelligence. The AI workspace currently has 109 members, who are a mix of representatives from law enforcement, academia and private industry. The workspace also has 87 documents uploaded by both workspace administrators and participants along with two live forums for knowledge exchange. Furthermore, the workspace has a Wiki section which has multiple pages providing information on AI related Virtual Discussion Rooms (VDRs) and Virtual Training Rooms (VTRs) that have been conducted by the IC. The Wiki section also has dedicated pages on law enforcement relevant areas in AI, such as audio and video forensics, computer vision and image processing, machine learning, natural language processing, smart robots and speech recognition. Additionally, the Wiki section also provides information on the IC's cooperation with UNICRI, especially with respect to the development of the Toolkit for the Responsible Use of AI by Law Enforcement.



Conclusion

Therefore, the IC's multifaceted efforts on AI include information sharing, administering trainings and bringing together experts for knowledge building. The IC also believes in undertaking proactive partnerships with relevant stakeholders like UNICRI to join forces and avoid duplication of efforts on AI. The INTERPOL-UNICRI collaboration, which has been ongoing since 2018 will result in the Toolkit for Responsible AI Innovation in Law Enforcement, which will be launched in 2023. The Toolkit will give insight on best practices on the ethical adoption of AI, to law enforcement agencies around the world. It is intended to be a live body of work which will be reviewed and adapted periodically through multistakeholder processes.

The IC aims to continue with its endeavors on AI and grow its network of subject matter experts and initiatives in order to support member countries in responsibly adopting AI for law enforcement use.