



## The Use of Artificial Intelligence (AI) In Crime Investigation: Problems and Solutions

**Rajabov Bekzod Xalimovich**  
Law Enforcement Academy  
of the Republic of Uzbekistan  
Senior Lecturer,  
Doctor of Philosophy in Law (PhD)

### ABSTRACT

This article is devoted to the ethical rules of using modern digital forensic technical tools, as well as artificial intelligence technologies in the activities of investigative bodies, and the prospects for their implementation into law enforcement practice.

The relevance and necessity of using artificial intelligence technologies in criminal proceedings and investigative practice are analyzed, the problems of using artificial intelligence are examined, and methodological recommendations for their solution are developed.

### ARTICLE INFO

**Received:** 28<sup>th</sup>

April, 2026

**Accepted:** 28<sup>th</sup> May, 2026

### KEY WORDS:

artificial intelligence,  
investigative actions,  
interrogation, crime scene  
investigation, investigator's  
tablet, evidence,  
admissibility of evidence,  
etc.

## Использование Искусственного Интеллекта В Расследовании Преступлений: Проблемы И Решения

**Ражабов Бекзод Халимович**  
Правоохранительная академия  
Республики Узбекистан  
Старший преподаватель,  
доктор философии по юридическим наукам (PhD)

**Аннотация:** данная статья посвящена правилам этики использования современных цифровых криминалистических технических средств, а также технологий искусственного интеллекта в деятельности следственных органов, и перспективам их внедрения в правоприменительную практику.

Проанализированы актуальность и необходимость использования технологий искусственного интеллекта в уголовном судопроизводстве и следственной практике, изучены проблемы применения искусственного интеллекта и разработаны методические рекомендации по их решению.

**Ключевые слова:** искусственный интеллект, следственные действия, допрос, осмотр места происшествия, планшет следователя, доказательство, допустимость доказательств и т.д.

**TERGOVDA SUN'IY INTELLEKT IMKONIYATLARIDAN FOYDALANISH ISTIQBOLLARI**

O'zbekiston Respublikasi  
Huquqni muhofaza qilish akademiyasi  
katta o'qituvchi,  
y.f.f.d (PhD)  
**Rajabov Bekzod Xalimovich**

**Annotatsiya:** Ushbu maqola tergov organlari faoliyatida zamonaviy raqamli kriminalistik texnik vositalar, shuningdek, sun'iy intellekt texnologiyalaridan foydalanishning etika qoidalari, ularni huquqni qo'llash amaliyotiga joriy qilish istiqbollari bag'ishlangan.

Jinoyat ishlarini yuritishda, tergov qilish amaliyotida sun'iy intellekt texnologiyalardan foydalanishning dolzarbligi, unga bo'lgan zarurat, sun'iy intellektdan foydalanishdagi muammolarni tahlil qilinib, ularni yechimiga doir ayrim takliflar ishlab chiqilgan.

**Kalit so'zlar:** sun'iy intellekt, tergov harakatlari, so'roq qilish, hodisa sodir bo'lgan joyni ko'zdan kechirish, tergovchining plansheti, dalil, dalillar maqbulligi va hokazo

Artificial intelligence (AI) tools play a crucial role in managing significant risks across various government sectors globally, including disaster response, law enforcement, counter-terrorism, and customs and border control.

While AI technologies are widely utilized for predictive analysis, surveillance, real-time monitoring, and improving the scale, speed, and accuracy of administrative processes, they also demonstrate an expanding scale and damage of crimes committed through their misuse. Specifically, according to statistics published by the International Criminal Police Organization (Interpol) and the World Bank, the damage caused by cybercrime reached \$10.5 trillion in 2025, and the damage from data breaches amounted to \$4.88 million in 2024, representing a 20% increase compared to 2020<sup>1</sup>. This indicates a decline in the quality of investigations and highlights the growing urgency of effectively leveraging the positive capabilities of AI technologies on a large scale in criminal investigations.

In global investigative practices, extensive research is being conducted using software related to AI-based facial recognition technology. This involves comparing real-time or recorded footage from surveillance cameras, as well as images from social networks and other sources, against image databases. It also includes identifying suspects, persons of interest, and missing individuals; matching names and fingerprints; facial and iris recognition; latent fingerprint comparison; and utilizing drones, 3D photography, and 3D scanners.

In our country, during the 12 months of 2024, out of 5,357 committed extremely serious crimes, 689 remained unsolved; out of 71,670 serious crimes, 55,514 remained unsolved; and out of 18,176 less serious crimes, 2,238 remained unsolved<sup>2</sup>. In 2024–2025, competent authorities revoked a total of over 52,000 illegal and unsubstantiated procedural decisions regarding the initiation of criminal cases, refusal to initiate criminal cases, suspension of investigations, and termination of criminal cases<sup>3</sup>. These indicators demonstrate a decline in the quality of investigative actions conducted by investigative bodies, an underutilization of information technology tools in criminal investigations, and the fact that current criminal procedural legislation does not fully define the procedural regulations for using artificial intelligence. Therefore, conducting research on utilizing AI capabilities in criminal investigations and thereby continuously improving procedural legislation remains highly relevant.

The Head of our State, Sh.M. Mirziyoyev, in his address to the Oliy Majlis and the people of the Republic of Uzbekistan, emphasized: "From now on, we will strengthen the protection of human rights by digitalizing investigations as well. In this regard, artificial intelligence technologies will be introduced into all stages, from receiving a report of a crime to transferring the case to court, thereby reducing the human factor."<sup>4</sup>

<sup>1</sup> <https://www.kt-team.ru/blog/cybercrime-2025-cybersecurity-trends-risks>

<sup>2</sup> Information from the Electronic Criminal-Legal Statistics Information Center of the Ministry of Internal Affairs

<sup>3</sup> "Information report on the 'Form P' statistical return of the General Prosecutor's Office for the 8 months of 2025

<sup>4</sup> <https://president.uz/uz/lists/view/8834>

According to Datareportal.com, the number of AI users worldwide is projected to reach 1 billion by 2026. Currently, 16.3% of the world's population (one in every six people) and 94% of global companies (approximately 417 million enterprises) utilize AI tools<sup>5</sup>. Nearly 69% of legal professionals (about 7 out of 10) incorporate AI tools into their workflows, with 28–31% of lawyers using AI daily. Globally, 75 countries deploy AI systems within their internal security and law enforcement agencies. According to research by UNESCO and Oxford University, approximately 44–50% of judges worldwide utilize AI tools in their professional activities.

Naturally, several legitimate questions arise: with these figures, to what extent are we placing our trust in artificial intelligence today? Does AI possess “inner conviction” or “emotion”? Can human destiny be entrusted to AI? Will AI replace investigators? Can its procedural decisions be legally considered valid and justified in the future? Where should the exact boundary lie in the interaction between AI and “humans”? Is it appropriate to upload crime case file data to AI and engage in data exchange with it? Have ethical rules for using AI in investigations been established?

To find answers to these questions, we must certainly turn to the analysis of the legal framework and regulatory documents. On February 26, 2026, the Minister of Digital Technologies of the Republic of Uzbekistan issued Order No. 284-MX “On Approving Ethical Rules for the Creation, Implementation, and Use of Artificial Intelligence-Based Solutions.”<sup>6</sup>

This order establishes the principles, requirements, and ethical rules for creating, implementing, and utilizing AI-based solutions, as well as the rights and obligations of AI participants. However, upon reviewing the requirements of this order, it remains ambiguous whether it can be applied to criminal proceedings and the field of investigation.

When analyzing the factors driving the use of artificial intelligence in investigations, several key catalysts emerge:

- continuous reforms aimed at improving investigation quality, driving digitalization, and reducing human-error risks;
- the heavy expenditure of time and resources on technical and organizational matters during criminal investigations;
- high workloads;
- the lack of sufficient time for investigators to further analyze and process gathered evidence and factual data in complex criminal cases;
- and the absence of a “rapid advisor” to assist in applying specialized knowledge, determining investigative directions, and resolving problems.

Today, AI is used universally, and law enforcement practice confirms that investigators utilize it as well. For instance, the pilot launch of the “Digital Prosecutor” information system by the Tashkent Regional Prosecutor's Office supports this view. Through this system, junior investigators and specialists can ask questions at any time and receive online consultations regarding issues encountered in investigative practice.

If we utilize artificial intelligence technologies correctly, they provide numerous benefits and opportunities. Some of these advantages include the following:

- Simplifying actions such as registering, recording, and forwarding crime reports;
- Further reducing additional resource and time expenditures;
- Assisting in the analysis of criminal cases and the rapid resolution of technical tasks during investigations;
- Utilizing its capabilities in conducting and documenting certain investigative actions (such as crime scene investigations and ordering expert examinations);
- Directly leveraging its assistance in facial recognition, expert analysis of photo and video footage, and evaluating data within forensic registries;

---

<sup>5</sup> <https://datareportal.com>

<sup>6</sup> <https://www.lex.uz/uz/docs/8083233>

- Enabling the automatic execution of voice commands during investigative actions, transcribing audio and video files into stenograms, or converting documents into written format, along with other technical workflows.

The integration of “Speech-to-Text” technology into the “investigator’s tablet” used in law enforcement practice, combined with the ability to instantly analyze necessary data from integrated big data platforms, not only enhances the quality of investigations but also significantly eases the burden on investigators.

Nevertheless, AI can generate several unique problems. These issues include the following:

- The absence of clear norms restricting the use of AI in situations that risk violating citizens' rights and freedoms during investigations;
- The lack of established ethical rules governing officials' use of AI capabilities in criminal proceedings;
- The absence of rules requiring notification to participants in criminal proceedings when AI is used, or mandatory disclosure in formalized documents specifying exactly where AI capabilities were utilized;
- The unresolved issue regarding the "admissibility" of evidence collected, or investigative and other procedural actions conducted, through the use of AI;
- The lack of procedural norms reflecting the permissibility of using AI software during interrogations, crime scene investigations, and other investigative actions;
- The absence of established rules for reviewing procedural decisions made via AI capabilities, filing appeals against them, or ensuring that decisions derived from AI are thoroughly reviewed and signed by the responsible official in charge of criminal proceedings to guarantee their accuracy.

To resolve the aforementioned problematic issues, the following methodological recommendations regarding the use of AI in the field of criminal investigation are proposed:

**First**, when utilizing artificial intelligence technologies, the principles of legality, respect for human dignity and rights, and the primacy of the human factor must be preserved. Artificial intelligence is not a sole or decisive decision-making tool in the stages of criminal proceedings; rather, it serves as an auxiliary information-analytical tool for investigators, inquiry officers, prosecutors, and judges. The use of digital and intelligent technologies, including artificial intelligence, must not violate, restrict, or discriminate against the constitutional rights and freedoms of participants in criminal proceedings.

**Second**, the use of automated systems, including artificial intelligence, must not violate the legally established procedural guarantees of participants in criminal proceedings—namely suspects, the accused, witnesses, victims, and other persons. All decisions of procedural significance must be made based solely on the human factor. When a decision is made utilizing the support of algorithms or an automated system based on artificial intelligence technologies, this must be explicitly indicated in the respective decision or protocol. The use of automated information systems, including artificial intelligence technologies, for collecting, storing, analyzing, and interpreting personal data is permitted exclusively within secure internal programs that are specially protected from the global information network. The applied AI-based algorithms must maintain transparency and the possibility of technical verification. The user of artificial intelligence is strictly required to comply with all demands established by law. At any stage where artificial intelligence technologies are applied, individuals whose interests are affected by the adopted decision must be notified, familiarized with it, and provided with an extract or copy thereof. Participants in criminal proceedings must be informed of their right to appeal against any procedural actions that resulted in the restriction of their privacy due to the use of artificial intelligence technologies.

**Third**, the use of artificial intelligence technologies is permitted for information retrieval, evidence analysis, modeling crime reports and other data, and drafting procedural decisions. Competent officials are prohibited from performing actions such as analyzing personal data by entering or uploading it into artificial intelligence programs that are not separately protected from the global information network without the consent of the data owner. Artificial intelligence cannot serve as a ground for making a decision without the investigator's direct participation in the investigation. Based on the requirements set for the content of a protocol, AI ensures the automatic verification of the date, time, location, participants, signatures, and other specific mandatory fields of the drafted protocol, thereby identifying errors related to the human factor.

Artificial intelligence can detect logical gaps or contradictions within a protocol and alert the investigator to missing elements.

**Fourth**, documents or evidence obtained through the use of AI technologies may be recognized as admissible evidence in a criminal case. The official conducting the criminal investigation must ensure that a legal evaluation is provided for this. Information obtained using artificial intelligence technologies, including results from analyzing images, video recordings, audio files, and digital footprints, may be recognized as evidence in the future, provided that their authenticity, reliability, and reproducibility are established.

**Fifth**, the use of AI-based technologies is permissible for automatic speech recording and analysis during interrogations. This is allowed provided that the artificial intelligence technologies ensure the accuracy of automatic speech processing and the authenticity of the recorded data.

**Sixth**, AI-based software tools may be utilized for data sorting, searching, and classification during the inspection of digital objects (such as mobile phones, servers, or cloud storage systems). The participation of a specialist is mandatory when using artificial intelligence systems to extract data from electronic devices during digital searches. When utilizing artificial intelligence, accessing and copying data stored on digital media that is irrelevant to the case is strictly prohibited.

**Seventh**, if artificial intelligence algorithms were utilized during an expert examination, the inquiry officer, investigator, prosecutor, or court may order an additional or repeated expert examination with the participation of specialists in the field of digital technologies to verify the accuracy of the results and the methods applied.

**Eighth**, automated analytical tools and AI-based technologies may be used when executing prosecutorial oversight and procedural functions; however, artificial intelligence technologies shall be applied solely as an auxiliary tool. It must not replace the prosecutor's independent legal assessment, must not diminish the procedural rights of participants in criminal proceedings, and must strictly comply with the principles of legality and impartiality. Algorithms influencing decision-making must be transparent, verifiable, and subject to review by a court or a higher-ranking prosecutor. The recording of court hearings may be carried out using automatic speech recognition systems based on artificial intelligence technologies, provided that the final text is mandatorily reviewed and verified by the judge.

**Nine**, prosecutors exercising supervisory authority over investigations and judges shall legally evaluate the lawful application of artificial intelligence technologies during criminal proceedings. In cases where incorrect, inaccurate, or non-transparent actions, or procedural violations arise from algorithmic data processing, the gathered data must be excluded from the evidence base. Furthermore, if the falsification of evidence is detected, a report must be submitted to the relevant competent authorities to ensure a legal evaluation, and an appropriate decision must be adopted.

These methodological recommendations, dedicated to developing ethical rules for the use of artificial intelligence in criminal investigations, were prepared within the framework of the practical project of the Law Enforcement Academy of the Republic of Uzbekistan entitled “Improving Investigative Bodies' Activities Through Digital Forensic Technical Tools.”

The aforementioned methodological recommendations are aimed at ensuring the implementation of the Decision of the President of the Republic of Uzbekistan No. PP-358 dated October 14<sup>7</sup>, 2024, “On Approving the Strategy for the Development of Artificial Intelligence Technologies Until 2030,” and the Decree of the President of the Republic of Uzbekistan No. UP-189 dated October 22, 2025, “On Additional Measures for the Further Development of Artificial Intelligence Technologies<sup>8</sup>.”

In conclusion, approving separate ethical rules for investigators on the use of artificial intelligence in criminal investigations, forming a proper culture regarding AI utilization, and introducing such methodological recommendations into investigative practice will yield highly positive results in law enforcement and elevate the quality of investigations to a superior level.

---

<sup>7</sup> <https://lex.uz/uz/docs/7158604>

<sup>8</sup> <https://www.lex.uz/docs/7789403>