

APPLICATION OF ARTIFICIAL INTELLIGENCE IN JUDICIAL AND LAW ENFORCEMENT SYSTEMS

S. MACHANSKI, P. SOLOJOV
Polotsk State University, Belarus

This article discusses the possibility of using artificial intelligence in judicial and law enforcement systems. The concept of "artificial intelligence" is disclosed, the principles of the use of artificial intelligence (AI) in the judicial and law enforcement systems are considered. And also provides examples of the use of artificial intelligence in the judiciary.

Artificial intelligence is an area of computer science that develops intelligent computer systems, that is, systems that have capabilities that we traditionally associate with the human mind — understanding the language, learning, the ability to reason, solve problems, etc. [1]. At the moment, programs with elements of artificial intelligence can recognize information by given parameters and use machine learning algorithms to increase the speed of work of lawyers. Their ability to transmit and organize huge amounts of information can also help a lawyer improve the quality of work.

The use of artificial intelligence in law in the United States, the European Union, Japan, South Korea and China is no less important than the use of AI in the fields of business, industry, transport, medicine and IT. CIS lawyers and foreign researchers of the problems of using AI in justice and law enforcement often raise the question of the ethics of using artificial intelligence in these areas. Researchers suggest that the use of AI in justice poses a risk of making a person, his rights and freedoms vulnerable, and justice itself is inhuman and formal. In order to dispel these doubts last December, the European Commission approved the European Ethical Charter on the use of artificial intelligence in the judicial and law enforcement systems [2].

The Charter states that the use of AI for processing court decisions and law enforcement will help to increase the level of detection of crimes, increase the level of evidence of indictments sent to the courts and provide a new level of validity of court decisions by reducing the number of errors in making them. This Charter contains 5 principles that should guide the work of public and private stakeholders responsible for the creation and implementation of AI and its components in the judicial and law enforcement spheres (machine intelligence methods include machine learning or any other processing methods).

The Charter supports the use of AI methods and components to enhance the effectiveness and quality of justice and law enforcement.

The Charter formulates five principles for the use of artificial intelligence:

1. The principle of respect for human rights. You need to make sure that the development and use of AI tools and services are compatible with basic individual rights. The processing of data and court decisions must fully comply with the European Convention on Human Rights and the Convention for the Protection of Personal Data. Such principles as the rule of law and the independence of judges, as well as the equality of citizens before the law should be complied. In case of non-compliance with these principles, the use of artificial intelligence in this area is simply impossible;

2. The principle of the prohibition of discrimination. Already at the stage of development of AI algorithms and big data used for machine learning, it is necessary to block the possibility of any discrimination between people or groups of people, which may arise as a result of an unconsidered use of statistical methods for analyzing raw big data. It is necessary that stakeholders already at the stage of development of AI software for judicial and law enforcement spheres block the possibility of discrimination of certain groups, layers and individual citizens as a result of the application of algorithms. The use of genetic data as well as biometric data related to health, sex life, and sexual orientation should be explicitly prohibited in AI algorithms used in the judicial and law enforcement systems. In case if such discrimination is detected, it is necessary to improve the system and not to apply it until discrimination is eliminated.

3. The principle of quality and safety. With regard to the development of algorithms and the use of data, the sources of big data, their structure and content should be analyzed, and it is also necessary to use mathematical models developed on an interdisciplinary basis that takes into account not only direct statistical correlations, but also social, cultural, economic and other factors causing these correlations. This system should be based on the experience of judicial and law enforcement officials, including judges, prosecutors, economists and social scientists.

4. The principle of transparency. In the judicial system and law enforcement agencies, AI can only be used if its implementation provides transparency, including the availability and comprehensibility of the source big data and the use of only those types of neural networks for which an external audit can find out the recognition criteria for certain groups. It is necessary to strike a balance between the intellectual property of developers on machine learning methods, used neural networks, etc. and the need to ensure transparency, impartiality and non-discrimination in AI programs and algorithms. It is advisable to establish the procedure according to which a prerequisite for using AI in judicial and law enforcement spheres is the transparency of their algorithmic base and the intelligibility of decision-making at all levels in order to prevent the use of discriminatory factors in the recognition of objects;

5. The principle of user control. Using AI in the judicial and law enforcement spheres it is necessary to exclude the normatively prescriptive approach and ensure that all users of the system are informed by the participants and operate the AI only if they can understand the algorithms and methods of using the AI. In the judicial system, just as in the military sphere, AI-black boxes cannot be used. Judicial officers should always understand and know what AI conclusions are based on, which are offered to them as automated expert opinion [3].

Let's look at some examples of how artificial intelligence is already involved in the judicial sphere.

In the United States, a program was created that correctly predicted decisions of the Supreme Court: 7 out of 10 decisions of the Supreme Court were correct, unlike an expert person who was able to predict the outcome of a case in only 6 out of 10 cases. Thus, we can say that the expert was not able to take into account all the facts and made a mistake due to the human factor. But the creator of the program, Josh Blackman, emphasized that the program is designed to help lawyers make more informed and effective decisions. He noted that his goal is to create interaction between man and machine so that they can compensate for each other's shortcomings. Most scientists argue that most of the tasks are too complex and ambiguous for machines. They are not able to find the answer to an unexpected question or to recognize the context in which words are used and to study the effect on a person of certain statements of a machine [4]. American judges also thought about using computer systems as an assistant who would record and remember the content of the lawsuits. People talk about the carelessness of the representatives of the judiciary, and a computer could make an accurate analysis and make a reasonable, right decision, guided by a reason, not a heart, which, due to design features, is missing. Hearing the facts and fixing their computer can be better than a person, and he cannot do the assessment of evidence. It is still unknown who will write the programs for the machine: to become a judge, education, age and experience are necessary, and to create the necessary algorithm, it may be entrusted to a person who has not encountered the justice system.

Nowadays, scientists and developers cannot come to a common opinion on the automation of the entire process of administering justice, that is, replace a judge with a computer program or a neural network that can analyze the actual circumstances of the case, give them a legal assessment and make an appropriate decision. Judges have a certain freedom in decision-making, which is not subject to algorithms. The AI can tell the judge, for example, how to make a decision in a particular case based on an analysis of precedents or judicial practice in this category of processes. Or, the AI may advise the parties to resolve the dispute before the trial. For example, at the moment, it is necessary to introduce a norm in the Code of the Republic of Belarus on administrative offenses, which established that before bringing a person to administrative responsibility in the form of a fine, the administrative body could use a program that would offer an option with the size of the fine taking into account the information about the offense. This innovation could ensure uniformity in enforcement, in the amount of the fine. High-quality AI drastically reduces the arbitrary interpretation of the rule of law and greatly reduces the possibility of administrative pressure on investigating prosecutors and judges. And in the opposite direction they give the opportunity to identify dubious decisions and sentences, for example, regarding the corruption component or even in cases of self-incrimination. In China, the USA, Great Britain, France and some other countries, such programs are already starting to be used, but at the moment they serve as an auxiliary tool for analyzing documents and do not replace a judge [5].

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