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The Role of Artificial Intelligence in Criminal Procedure

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Abstract: The artificial intelligence (AI) has been used in the United States of America in the decisionmaking process of the criminal justice system for decades. In the field of law, including criminal law, AI can provide serious assistance in decisionmaking in many places. The paper reviews four main areas where AI still plays a role in the criminal justice system and where it is expected to play an increasingly important role. The first area is the predictive policing: a number of algorithms are used to prevent the commission of crimes (by predicting potential crime locations or perpetrators). This may include the so-called linking hot-spot analysis, crime linking and the predictive coding. The second area is the Big Data analysis: huge amounts of data sets are already opaque to human activity and therefore unprocessable. Law is one of the largest producers of digital documents (because not only decisions, but nowadays the entire document material is available digitally), and this volume can only and exclusively be handled with the help of computer programs, which the development of AI systems can have an increasing impact on. The third area is the criminal statistical data analysis. The collection of statistical data using traditional methods required enormous human resources. The AI is a huge step forward in that it can analyze the database itself, based on the requested aspects, a collection according to any aspect can be available in a few seconds, and the AI itself can analyze the database and indicate if it finds an important connection either from the point of view of crime prevention or crime detection. Finally, the use of AI during decision-making in both investigative and judicial fields is analyzed in detail. While some are skeptical about the future role of AI in decision-making, many believe that the question is not whether AI will participate in decision-making, but only when and to what extent it will transform the current decision-making system.

Keywords: artificial intelligence, international criminal cooperation, planning and organizing of the investigation, risk assessment

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