Artificial Intelligence in Criminal Law
(focusing on use in criminal investigation)

Abstract

Artificial intelligence is a phenomenon that is gradually infiltrating all areas of our lives, which is closely related to its practical application in various legal sectors. Within the boundaries of Czech criminal law, artificial intelligence is a relatively unexplored topic. However, we can encounter many cases of its integration in criminal law practice abroad, from where it is possible to draw experience with this technology for its effective use in our country.

This thesis focuses on selected criminal law aspects related to artificial intelligence. Firstly, it defines the central concept along other related terms and summarizes the most up-to-date efforts of criminal legislation on artificial intelligence. It also presents the most recent version of the new European regulation, the so-called Artificial Intelligence Act. Later, the thesis explores the issues of criminal liability of artificial intelligence, introduces new methods of criminal activity using this technology and examines the potential impact of artificial intelligence on decision-making in criminal procedure. The subtopic of the thesis is the practical application in law enforcement. In more detail, the thesis focuses on artificial intelligence used by the police in criminal investigations such as crime prediction systems, evidence collection and analysis, and biometric identification. The thesis concludes by offering insight into the future, introducing questions for discussion and proposing specific recommendations.

The main contribution of the thesis is the discovery of essential problematic aspects of the use of artificial intelligence in criminal law, which indirectly lead to the violation of fundamental rights and freedoms of the people involved. These include the increased error rate in biometric identification systems, which is mostly evident in identifying people with darker skin color; the discriminatory tendencies of algorithms used in criminal proceedings towards members of ethnic or national minorities due to their insufficient representation in the datasets used to train these algorithms; and non-transparency of forensic software used as evidence in court, the source code of which is inaccessible to the parties, who are then unable to fully exercise their right of defence and right to a fair trial. The absence of legal regulation on artificial intelligence in the field of criminal law has also proved to be a significant factor.

Key words: artificial intelligence, criminal law, investigation