

ARTIFICIAL INTELLIGENCE: FROM CRITICAL THINKING TO ITS APPLICATION IN CRIMINAL JUSTICE SYSTEM

Abstract: *The imputation of intelligence to machines, as an essential human determinant, was once only an imagination far from reality. However, the development of modern technological achievements, especially computer hardware and algorithms, has enabled the metamorphosis of artificial intelligence from an academic concept into a contemporary reality, with its infiltration into many aspects of modern life, including the criminal justice system. At the same time, its exponential potential to cause dramatic changes has raised concerns that, despite the undoubted benefits that its implementation may bring, the challenges it raises are also inevitable. For this reason, its breakthrough into criminal justice is “under scrutiny” due to the potential repercussions and (broad) implications that its application may cause, especially if artificial intelligence systems are used as auxiliary tools of judicial bodies in factual research, as well as in the interpretation and application of the results of such research in a specific case. This paper provides a cross-section of the historical genesis of artificial intelligence, accompanied by critical reflections on its achievements and concerns regarding its application. It also considers the implementation of artificial intelligence tools in the criminal justice system, which includes the predictive work of police and judicial authorities, the process of collecting and analyzing evidence, searching databases, as well as the use of artificial intelligence for transcribing the course of the hearing, but also for anonymizing court decisions and harmonizing case law. This paper provides a basis for further research and consideration of the application of artificial intelligence in criminal justice.*

Keywords: *artificial intelligence, predictive systems, transparency, machine evidence, criminal procedure*