Bialystok Legal Studies
Białostockie Studia Prawnicze
2025 vol. 30 no. 4

sciendo

DOI: 10.15290/bsp.2025.30.04.11

Received: 23.09.2025
Accepted: 13.11.2025

Halina Sierocka
University of Bialystok, Poland
h.sierocka@uwb.edu.pl
ORCID ID: 0000–0002–6930–6409

Legal and Ethical Issues Related to the Use of Artificial Intelligence in the Field of Justice[1]

Abstract: The rapid development of artificial intelligence (AI) has created many opportunities in various areas of human life, such as facilitating healthcare and education, improving production processes and creating labour efficiencies, or enabling human connections through social media, to name a few. Even though AI technology can be of excellent service to humanity, it also risks embedding biases which result in discrimination and inequality, as well as violations of human rights and fundamental freedoms, which, not surprisingly, raise numerous legal and ethical concerns. Given these issues, this paper endeavours to provide some insights into the application of artificial intelligence in the judiciary and to answer some questions which might be posed in this context: Are AI algorithms capable of simulating judicial decision-making? Can legal and ethical standards characteristic of the judicial function be maintained when AI tools are employed in the field of justice? The main highlights of the paper refer to the shaping of the legal framework in the AI area, compliance with ethical guidelines and recommendations, and risks and biases created and embedded by AI algorithms, as well as the issue of transparency towards both parties and the public, and in the area of AI algorithmic reasoning and methods. The paper concludes with some examples of national case law from courts' decisions on AI from five EU Member States, which provide specific case background for the issue in question.

Keywords: artificial intelligence, bias, ethics, human rights, judiciary

Introduction

1 The article is financially supported by the Polish Minister of Science under the 'Regional Initiative of Excellence' (RID) programme.

Defining AI is difficult due to the complexity of the issue. While numerous scholars have endeavoured to define the concept, others have cast doubt on whether it is possible to do so at all due to the rapid changes which affect this area. A full discussion of the notion of AI lies beyond the scope of this study; however, two definitions are worth mentioning. John McCarthy, considered the inventor of AI, and his collaborators describe AI in their study 'A proposal for the Dartmouth summer research project on artificial intelligence' as 'allowing a machine to behave in such a way that it would be called intelligent if a human being behaved in such a way' (2016, p.1). As Reiling highlights in this context, 'it is important to establish, defining human intelligence as the measure of what AI does' (2020). Intelligence as such can be 'the ability to reason abstractly, logically and consistently, discover, lay and see through correlations, solve problems, discover rules in seemingly disordered material with existing knowledge, solve new tasks, adapt flexibly to new situations, and learn independently, without the need for direct and complete instruction' (Reiling, 2020). For this paper, I will adopt the definition proposed by UNESCO's Recommendation on the Ethics of Artificial Intelligence, which suggests a dynamic understanding of AI; it interprets AI broadly as a system with the ability to process data in a way that resembles intelligent behaviour. This definition is fairly general, but this is an advantage, as the rapid pace of technological advancement would quickly make any fixed and narrow definition outdated and hence make adopted policies unfeasible.

To understand the way AI works, it is important to realise that this sophisticated software, which is programmed to automate routine, generally involves Machine Learning (ML), i.e. a subset of AI which focuses on enabling machines to 'learn' how to perform certain tasks and improve with human direction and feedback. In turn, as Heshmaty (2022) explains, it uses Natural Language Processing (NLP) software that can understand written and spoken commands from people who may not have any computer programming knowledge, and this combination of AI, ML and NLP enables people who do not understand computer codes to interact with and train the software to assist them in their study, work or hobbies.

As was mentioned above, AI has evolved greatly; it is everywhere and affects everyone, and not surprisingly its relevance to and impact on the justice system have become particularly significant. The literature on this subject is not yet particularly extensive, but it is growing rapidly, along with the abundance and variety of research problems. They cover such issues as the impact of AI on ethics, human rights, democracy and the rule of law (Franguloiu, 2023; Guitton et al., 2025; John et al., 2023; Josten, 2023; Moore et al., 2025; Muller, 2020), the role of AI in the judiciary (Cabrera et al., 2024; Kuo, 2024; Yu, 2022), the application of AI in the criminal justice system (Jadhav et al., 2020; Shi, 2022; Simmons, 2018; Stănilă, 2020; Watamura et al., 2025) or judges' perception of AI as well as judges using AI in their decision-making process (Fine et al., 2025; Yalcin et al., 2023). The importance of AI is also reflected in

numerous initiatives and actions taken, as well as the laws adopted in recent years to regulate the issue, which will be presented in detail in the following section.

1. Shaping the legal framework for AI

On 16 December 2024 the Council of the European Union (Justice and Home Affairs) approved a set of conclusions on the use of artificial intelligence in the field of justice, which include the most significant documents in the area:

- Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence (the AI Act) is the first comprehensive legislative instrument in the world to regulate AI. It classifies AI systems for certain applications in the fields of justice, law enforcement and alternative dispute resolution as high risk, and subjects them to a set of requirements, such as conformity assessment procedures and controls, with a view to ensuring a high level of trustworthiness. The main priority was to make sure that AI systems used in the EU are transparent, safe, traceable, non-discriminatory and environmentally friendly;
- A number of conclusions by the Council of the European Union which address the issue of digitalisation, i.e.:
  - the Council Conclusions of 9 June 2020 on shaping Europe's digital future, which drew attention to the challenges created by increased digitalisation in the European economy and society, including by AI;
  - the Council Conclusions of 13 October 2020 on digitalisation on 'Access to justice – seizing the opportunities of digitalisation', which stressed the importance of the digital transition in increasing the effectiveness and efficiency of justice systems;
  - the Council Conclusions of 20 October 2023 on digital empowerment to protect and enforce fundamental rights in the digital age, which concern the digital empowerment of individuals and sectors that are key for the defence of fundamental rights, such as justice, as well as the construction of a safe digital environment where fundamental rights are properly protected;
  - the Council Conclusions of 5 March 2024 on the application of the EU Charter of Fundamental Rights, which promote trust through effective legal protection and access to justice, including by 'seizing the opportunities of digitalisation'.

The conclusions also enumerate several other documents adopted by numerous international organisations which might constitute significant input in shaping the legal framework for the application of AI in the judiciary. Those that address ethics,

bias, discrimination or protection of human rights, democracy and the rule of law are particularly worth mentioning:

- the European Commission for the Efficiency of Justice (CEPEJ) of the Council of Europe's European Ethical Charter on the use of artificial intelligence in judicial systems and their environment, alongside related guidelines by CEPEJ on the use of AI in the judiciary;
- the UN Human Rights Council Resolution of 10 July 2024 on the promotion and protection of all human rights and civil, political, economic, social and cultural rights, including the right to development, especially its provisions on the independence and impartiality of the judiciary, jurors and assessors, and the independence of lawyers;
- the Council of Europe framework convention on artificial intelligence and human rights, democracy and the rule of law, opened for signatures on 5 September 2024, which aims to ensure that the activities within the lifecycle of AI systems are fully consistent with the protection of human rights, democracy and the rule of law, while being conducive to technological progress and innovation; it has also been emphasized that this first internationally binding treaty on AI aims to fill any legal gaps that may result from rapid technological advances, however it does not aim to regulate technology to stand the test of time;
- the reports prepared by the European Union Agency for Fundamental Rights, such as 'Getting the future right: Artificial intelligence and fundamental rights' and 'Bias in algorithms: Artificial intelligence and discrimination'.

Artificial intelligence was and still is a challenge not only for legislatures but also for the judiciary. Undoubtedly, AI can strengthen access to justice and make judicial administration more efficient; however, it needs to be governed with care, especially in areas such as transparency, human rights or ethical concerns like bias, discrimination and privacy. In that vein, the role of the judiciary cannot be overestimated. However, for most judiciaries, AI is a new concept too, thus guidelines are strongly desired. According to the UNESCO (2024) Global Judges' Initiative, a survey on the use of AI systems by judicial operators, 44% of respondent judges use ChatGPT and other AI tools for work purposes. However, only 9% of them receive training or have institutional guidelines at work. In response to this need, some countries, such as Brazil (2020), Canada (2023), New Zealand (2023) and the United Kingdom (2023), have already issued guidelines for the use of generative artificial intelligence in courts and tribunals. It is worth mentioning UNESCO's initiatives in more detail here, as they approach the problem in a more comprehensive way.

On the basis of the Recommendation on the Ethics of Artificial Intelligence adopted in 2021 by 193 UNESCO Member States, the programme called Artificial Intelligence and the Rule of Law was launched in 2022, which aimed to engage stakeholders within justice systems in a global discussion on the applications of artificial

intelligence and its impact on the rule of law. One of the practical outcomes is the Global Toolkit on AI and the Rule of Law for the Judiciary, which is intended as a curriculum to serve national judicial training institutions, universities and other legal education organisations offering training. Moreover, a Global Network of Experts on AI and the Rule of Law was established within the programme, an interdisciplinary group of experts (both academics and practitioners) which provides technical assistance and training to judiciaries worldwide, hence supporting the responsible adoption and governance of AI technologies.

In addition, in response to the aforementioned survey, respondents strongly supported mandatory regulations and training on AI use in judicial activities, with 92% calling for such measures. UNESCO has thus started to develop guidelines for the use of AI systems in courts and tribunals, based on the UNESCO Recommendation. These guidelines are to provide guidance both for the organisations of the judiciary and for individuals, to make sure that AI technologies are adopted in alignment with justice, human rights and the rule of law. A special emphasis is put on the protection of human rights, especially in the context of personal data protection, proportionality, non-discrimination, accountability and legality. It is highlighted that courts and tribunals exploiting AI for their work are strongly recommended to use the principle of proportionality and necessity, together with algorithmic impact assessment tools. They are recommended to disclose key information about the AI systems used by the judiciary, i.e. what AI systems are adopted, how they operate and how they are used. In addition, the guidelines demonstrate the need for establishing internal procedures as regards access to the appropriate training, risk management systems or cybersecurity measures. Individuals (i.e. judges, prosecutors, judicial officers and judicial support staff), on the other hand, are advised to use tools that are tested and approved, to always verify outputs and to disclose the use of GenAI systems for drafting rulings, opinions and other documents that may bear legal consequences. It has also been emphasised that they should avoid overreliance on AI tools while making substantive decisions.

2. Challenges of the use of artificial intelligence in the field of justice in the light of legal and ethical standards

The development of artificial intelligence raises novel issues and profound concerns for which current legal systems are only partially prepared. These include questions of rights, freedoms and ethics. Some questions might be posed here: To what extent can AI tools assist the judiciary in the administration of justice? Are AI algorithms capable of simulating judicial decision-making? Can the legal and ethical standards inherent in the judicial function be maintained when AI tools are exploited

in the process? The questions arise from the potential AI systems have to reinforce bias and put human rights at risk.

The awareness of EU lawmakers that the use of AI systems might have a detrimental impact on people's health, safety and fundamental freedoms and rights resulted in the risk-based AI classification system in the AI Act. The AI systems that can be exploited in various applications are analysed and classified according to the risk they pose to users. The Act introduces different provisions for different risk levels, thus providing AI compliance requirements. The classification system identifies four different risk categories: unacceptable risk, high risk, transparency risk and minimal to no risk. The first group includes AI tools which are banned and refers to:

- the cognitive behavioural manipulation of people or specific vulnerable groups, i.e. voice-activated toys that incite dangerous behaviour in children;
- social-scoring AI, i.e. classifying people based on behaviour, socioeconomic status or personal characteristics;
- the biometric identification and categorisation of people;
- real-time and remote biometric identification systems, such as facial recognition in public spaces.

However, for law enforcement purposes and to prosecute serious crimes, the Act provides for some exceptions as regards real-time and remote biometric identification systems.

The category of 'high-risk' AI systems concerns tools that might affect safety and fundamental rights. They include:

- AI systems that are used in products falling under the EU's product safety legislation, such as toys, aviation, cars, medical devices and lifts;
- AI systems that fall into specific areas that require registration in EU databases, i.e. the management and operation of critical infrastructure, education and vocational training, employment, worker management and access to self-employment, access to and enjoyment of essential private services, public services and benefits, law enforcement, migration, asylum and border-control management, assistance in legal interpretation and application of the law.

Moreover, all high-risk AI tools will be subject to assessment both before them being made available on the market and throughout their life cycle. The Act also provides for the possibility to file a complaint about AI systems to respective national authorities.

Transparent-risk AI systems (generative AI), like ChatGPT, are not classified as high risk but will have to comply with transparency requirements and EU law. This means informing users that the content was generated by AI, designing the model to prevent it from generating illegal content and publishing summaries of copyrighted data used for training, as well as labelling content that is either generated or modified with the help of AI, like images, audio or video files (e.g. deepfakes), as AI-generated.

As mentioned before, AI technology can be of great service to humanity, but without ethical standards it risks embedding biases that result in discrimination and inequality, as well as violations of human rights and fundamental freedoms. Recognising the importance of this problem, more than 25 international institutions have addressed the issue of ethical standards for the application of AI systems in court practice. As their content overlaps, and due to practical constraints, only two main instruments will be described here in more detail.

In 2018 the European Commission for the Efficiency of Justice (CEPEJ) of the Council of Europe, adopted the first European text setting out ethical principles relating to the use of artificial intelligence in judicial systems. The main highlights are:

- ensuring that the design and implementation of artificial intelligence tools and services are compatible with fundamental rights (Principle of respect of fundamental rights);
- preventing the development or intensification of any discrimination between individuals or groups of individuals (Principle of non-discrimination);
- using certified sources and intangible data with models conceived in a multi-disciplinary manner, in a secure technological environment (Principle of quality and security: with regard to the processing of judicial decisions and data);
- making data processing methods accessible and understandable, authorising external audits (Principle of transparency, impartiality and fairness);
- precluding a prescriptive approach and ensuring that users are informed actors and in control of their choices (Principle 'under user control').

Another document worth mentioning is UNESCO's Recommendation on Ethics and Artificial Intelligence, adopted in 2021. This comprehensive instrument makes a strong call to governments around the world to establish the necessary institutional and legal frameworks to ensure ethical standards for AI technologies, in full respect of international law and in particular human rights law. The protection of human rights and dignity is the cornerstone of the Recommendation, which is reflected in a human rights-centred approach to the ethics of AI. The document introduces ten principles:

1) *Proportionality and do no harm* – AI systems cannot be used beyond what is necessary to achieve a legitimate aim, and the risk should be assessed to prevent harms which may result from such uses;
2) *Safety and security* – AI actors, i.e. anybody involved in any stage of the AI life cycle (from research through development and use to disassembly and termination), should avoid unwanted harm and the danger of attack;
3) *Right to privacy and data protection* – privacy must be protected and promoted through the AI life cycle;
4) *Multi-stakeholder and adaptive governance and collaboration*;

5) *Responsibility and accountability* – AI tools should be auditable and traceable, i.e. there should be oversight, impact assessment, audits and due diligence mechanisms to avoid violations of human rights norms; for example, if when someone applies for a loan, the bank uses AI to make an automated assessment of their finances, and if the decision is taken without human oversight and accountability, the consequences might be significant – the system may make a mistake, and there is nobody who can take responsibility for the decision, hence appeals are in fact not possible.
6) *Transparency and explainability* – the ethical implementation of AI tools should be based on their transparency and explainability, which means that people should be aware that the decision is taken by AI and that the logic behind the algorithmic decision-making can be fully interpreted by experts and be explained to users in accessible language. The term 'black box' has been used to describe AI systems that are opaque and hard to interpret.
7) *Sustainability*;
8) *Human oversight and determination* – AI systems should not displace ultimate human responsibility and accountability;
9) *Awareness and literacy*;
10) *Fairness and non-discrimination* – social justice, fairness and non-discrimination should be promoted, while taking an inclusive approach to ensure AI's benefits are accessible to all.

It is worth mentioning that apart from values and principles which are crucial to establishing a basis for any ethical AI framework, the Recommendation also sets out key areas for policy actions where ethics play an important role. They include ethical impact assessments, ethical governance and stewardship, gender equality, data policy, development and international cooperation, education and research, culture, labour markets, the environment and ecosystems, communication and information, health and social being, and the economy. Overall, all the documents refer to the five key aspects of ethical standards for the use of AI in the judiciary: AI under user control, respect for fundamental rights, equal treatment, data security and transparency.

An important aspect highlighted by some researchers (e.g. Reiling, 2020) and lawmakers / institutions (e.g. the CEPEJ principle) is to have AI under user control, which means that the algorithm may not be used as a prescription, i.e. the AI system cannot prescribe anything and cannot decide by itself. Users must know and understand what the AI does and must be in control of the decisions they make, meaning that they must be able to 'deviate from the outcome of the algorithm without difficulty' (Reiling, 2020). In her article, Reiling provides a striking example of what can happen when an AI system is relied on blindly. In the UK, a piece of IT determines the financial capacity of (ex-)spouses in maintenance proceedings; the parties fill in a form and the AI tool cal-

culates their capacity. As a result of a small, unnoticed mistake, calculations were made wrongly in 3,638 cases (between April 2011 and January 2012, and between April 2014 and December 2015). The assets taken into account were too high, as, instead of being deducted, debts had been added. In the pending cases, this could be and was corrected, but more than 2,200 wrong decisions were issued.

The human oversight of AI-created output is of paramount importance when the AI technology is exploited in the judicial decision-making process. Within this context, so-called predictive justice tools (the AI tools used for the assessment and prediction of possible litigation outcomes) raise serious ethical concerns, which are reflected in numerous provisions. To quote just one of these, Article 22(1) of the General Data Protection Regulation 2016/679 (GDPR) states that: 'The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her.' Predictive tools are attracting a lot of attention because they claim to be able to reduce the risk of an unpredictable litigation outcome. The more complex a case becomes with additional information and circumstances, and the more the risk increases, the more desirable the AI tool becomes. According to a report by the European Commission for the Efficiency of Justice, predictive justice tools are more popular in the United States than in the EU; however, as they are offered commercially (and the owners/creators are reluctant to share their business secrets), not much is known about how they operate. Below are some examples of predictive justice tools introduced to the judiciary, along with the risks they may pose.

Lex Machina and Solomonic are two commercial products that use AI to filter thousands of court judgments available online to help lawyers predict the outcome of cases by analysing vast collections of historical judgments, looking at the facts of each specific case and the decisions made by the judge. As the creators claim, the AI system can reduce the likelihood of wasting time and money on going to trial where a case is unlikely to succeed, can help lawyers decide on the best settlement and can generally reduce risk when developing litigation strategies. Nevertheless, AI systems are not able to explain exactly *why* certain litigation strategies are more successful than others. It is often seen as (de)coding justice, i.e. translating law into code without considering unpredicted circumstances or re-examination in the light of social change. Interestingly enough, both systems are known to be misused by legal professionals and are forbidden in some countries (for example in France).

Across the world, judges, prosecutors and court staff are increasingly exploiting various risk-assessment algorithms to assess a criminal defendant's likelihood of becoming a recidivist. The tools furnish judges with information on pre-trial bail, sentencing and parole, suggesting who can be released at each stage of the criminal proceedings. One of the most commonly exploited pieces of risk-assessment software in the US, developed especially for courts, is the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS). On the basis of 137 questions an-

swered by the offender during interview and on the information obtained from their criminal history, and taking into account criminological factors such as socioeconomic status, family background and employment, etc., the algorithm provides a report on a calculated risk score (1 to 10), categorising the offender as at high, medium or low risk of re-offending. In Eric Loomis's case, the Wisconsin Supreme Court highlighted the need for cautious use of COMPAS, particularly arguing that 'studies have raised questions about whether COMPAS scores disproportionately classify minority offenders as having a higher risk of recidivism' (Papp et al., 2022).

Another interesting example, described by Kravetz (2014), refers to a machine-learning application developed by a group of American academics chaired by Josh Blackman, a South Texas College of Law scholar, which claims to be able to predict, with 70% accuracy, whether the US Supreme Court (SCOTUS) will uphold or reverse the lower-court decision before it. The AI tool is even more accurate when it comes to the voting behaviour of individual judges (71.9%). Blackman went even further, wondering whether humans are more accurate than an algorithm, and created FantasySCOTUS, a Supreme Court 'Fantasy League' where attorneys, law students and other Supreme Court followers make predictions about cases before the Supreme Court. Interestingly enough, some FantasySCOTUS participants hit a 75% accuracy level.

Aletras et al. (2016) present in detail another AI application which claims to be capable of predicting the decisions of the European Court of Human Rights (ECHR) with even 79% accuracy. This AI system exploits NLP and ML to forecast whether or not in a particular case the ECHR will adjudicate on the violation of a particular provision of the European Convention on Human Rights. The scholars observed that the most important part of 'obtaining on average the strongest predictive performance of the Court's decision outcome' is the information on the factual background of the case as it is formulated by the Court in the respective part of its judgment. The AI system recognises the patterns in a text document and can thus quickly identify in which direction a judgment could go. It is important to remark here that the study was not free from some limitations, like data access issues: the tool only used the data obtained from earlier HUDOC judgments, which are easily and freely available. Other kinds of data (such as the texts of individual applications, briefs submitted by parties, domestic judgments or inadmissible requests) were not included in the study due to limited or no access.

Another serious concern in terms of the ethical use of AI systems relates to preserving equal treatment and avoiding discrimination between individuals or groups of individuals. In fact, we can claim that AI systems may reinforce salient inequalities embedded in structures of prevailing patterns of social behaviour under the cover of impersonal impartiality and rational objectivity. The next example shows that bias and discrimination between individuals and groups are a real risk, and errors the AI makes concern one social group more frequently than another, particularly in areas such as asylum, social protection benefits, family disputes and sanctioning. The study

in question was conducted in 2016 by ProPublica, a non-profit investigative journalism organisation, which assessed COMPAS, mentioned above, to reveal the underlying accuracy of their recidivism algorithm and to examine whether the algorithm was biased against certain groups of individuals (Larson et al., 2016). The study looked at more than 10,000 criminal defendants in Broward County, Florida, and compared their predicted recidivism rates with the rate that occurred over two years. Most defendants filled in a COMPAS questionnaire when booked into jail; their answers fed into the COMPAS software to generate several scores, including predictions of 'Risk of Recidivism' and 'Risk of Violent Recidivism'. The study showed that COMPAS correctly predicted recidivism 61% of the time, but revealed that black defendants were far more likely than white ones to be incorrectly judged to be at a higher risk of recidivism, while white defendants were more likely than black ones to be incorrectly flagged as low risk.

Prediction Fails Differently for Black Defendants

	WHITE	AFRICAN AMERICAN
Labeled Higher Risk, But Didn't Re-Offend	23.5%	44.9%
Labeled Lower Risk, Yet Did Re-Offend	47.7%	28.0%

Source: Larson et al., 2016

The analysis also indicated that even when controlling for prior crimes, future recidivism, age and gender, black defendants were 45% more likely to be assigned higher risk scores than white ones. As regards violent recidivism, it also showed that even when controlling for prior crimes, future recidivism, age and gender, black defendants were 77% more likely to be assigned higher risk scores than white defendants.

In a society governed by the rule of law, the use of judicial power must be transparent; judges justify their power by providing reasoning for their decisions. The transparency and interpretability of algorithms are low; although most powerful Large Language Model tools operate through multi-dimensional computational space with trillions of computations, their transparency and interpretability are low and in fact lead to paradoxes like the 'opacity paradox' (the more effective an AI tool is, the less transparent and understandable it is to human comprehension) or the 'hallucination paradox' (the more extensive the input data is, the less detectable fake output data is), with little or no guarantee that false correlations are excluded. The inability to explain the reasoning through which an algorithm has reached its output in the form of the verdict, i.e. which facts were given relevance, what evidence was deliberated on and weighted, how relevant legal provisions were prioritised, etc., raises

fair trial concerns, and hence the violation of the fundamental human right that is the right to a fair trial.

Apart from the legal and ethical concerns described above, it needs to be highlighted that AI tools lack reasoning; they neither think nor provide the meaning of the legal texts, and they do not assess the facts and search for the truth – they compute, i.e. calculate, probability and determine correlations and patterns between lexical groups composing judicial decisions, hence de facto reducing reasoning to syntax and pure form. Judges do not compute. They employ all means of human reasoning (mastery of law, formal logic and procedure, human intuition, emotional intelligence, common sense, life experience, etc.) to reach a decision in an individual case that best achieves the purposes of the applicable law, in conformity with fundamental values of the legal order such as fairness, common sense or equality.

3. National case law on decisions on AI

National case law on artificial intelligence is not yet particularly elaborate. Therefore in the context of this study, it is worth presenting those cases that refer to ethical standards relating to the use of artificial intelligence, especially with regard to fundamental rights, the protection of personal data or access to information about data.

3.1. Fundamental rights: The automatic analysis and use of data

In its judgment of 19 February 2023, the Federal Constitutional Court (*Bundesverfassungsgericht*) of Germany held that two statutory provisions of the *Länder* of Hesse and Hamburg are unconstitutional. The provisions in question (§25a(1) (first alternative) of the Security and Public Order Act for Hesse (*Hessisches Gesetz über die öffentliche Sicherheit und Ordnung*) and §49(1) (first alternative) of the Act on Data Processing by the Police for Hamburg (*Hamburgisches Gesetz über die Datenverarbeitung der Polizei*)) authorise the police to process stored personal data either through automated data analysis or automated data interpretation for the prevention of criminal acts. The Court held that in the absence of a sufficient limit on intervention, these provisions violate the general right of personality (Article 2(1) in conjunction with Article 1(1) of the Basic Law (*Grundgesetz*)) in its manifestation, i.e. as the right to informational self-determination. It was underlined that due to the particularly broad wording of the powers, in terms of both the data and the methods concerned, there is a particularly high degree of interference. The method of automated analysis or use is therefore all the more intrusive (it is possible to obtain a wide-ranging and thorough knowledge of data subjects), the risks of errors and discrimination are high and it is difficult to trace the generation of results, therefore there is identifiable danger. The Court decided that §25a(1) (first alternative) of the Hessian Security and Public Order Act continues to apply, subject to some restrictions whereas §49(1) (first alternative) of Hamburg's Act on Data Processing by the Police was declared null and void.

3.2. Protection of personal data: The use of algorithms by the Public Employment Service in Austria

The Austrian Supreme Administrative Court (*Verwaltungsgerichtshof*) examined a case concerning an algorithm used by the Austrian Public Employment Service to assess jobseekers' labour market opportunities; the AI automatically calculates the probability of applicants being employed within a specific period. In its judgment, the Court classed the algorithm (i.e. the calculation of the chances of candidates on the labour market) as profiling under Article 4(4) of the General Data Protection Regulation (GDPR). In its judgment of 21 December 2023, the Court held that an algorithm determining the likelihood of job applicants being hired is prohibited automated decision-making under Article 22 GDPR, even if the result is used exclusively by a public body to provide jobseekers with targeted employment counselling. However, the Court stated that this issue could not be conclusively examined, as the first instance administrative court had not given sufficient findings on the precise use of the AI by the Austrian Employment Service, particularly as regards the procedures and/or other parameters used in the process; it was therefore referred back to the first instance administrative court.

3.3. Data protection: Freedom of opinion and elections

When the Spanish Constitutional Court dealt with the issue of the use of artificial intelligence algorithms in electoral processes, it referred to Article 58(b)(1) of the Organic Law on the General Electoral Regime (LOREG), which allows political parties to collect personal data on political opinions as part of their activities. In its judgment of 22 May 2019, (No 76/2019) the Court declared the aforementioned provision unconstitutional as it could enable political parties to manipulate unaware voters using tailored propaganda that is automatically elaborated based on their profiles. The Court pointed out in its reasoning that the purpose of data processing stated under Article 58(bis) of the LOREG is quite vague (only a generic public interest is mentioned), making a constitutionality check on restrictions to the fundamental right to personal data protection impossible. Moreover, the provision does not provide for clear rules on the conditions of data processing and its limitations. This lack of precision was found to be a violation of legal certainty and of the core of the fundamental right in question. In that light the Court concluded that there are no adequate and precise guarantees to protect the aforementioned right, hence the law does not meet the requirements of certainty and predictability which are indispensable to guarantee the fundamental right to personal data protection. Consequently, the Spanish Constitutional Court held that the provision in question violated Articles 18(4) and 53(1) of the Spanish Constitution.

3.4. Automated decisions: The right of access to information

The Amsterdam Court of Appeal dealt with the case of taxi drivers whose collaboration with Uber Driver was terminated (and consequently their smartphone application deactivated) using an 'automated decision'. The Uber Driver company claimed in that automated decision that the drivers had failed to fulfil their contractual obligations by committing fraud. After analysing the character of the contested decisions, the Court of Appeal, in its judgment of 4 April 2023, held that Uber Driver, in accordance with Article 15(1)(h) of the General Data Protection Regulation, was under the obligation to give the drivers access to information on the existence of the automated decision so that they could defend their rights, as the decisions, along with the allegations of fraud included therein, might have a significant impact on their lives (i.e. lost investments and/or taxi licences). Moreover, the Court highlighted that the decisions were formulated in very general terms, and although Uber Driver claimed that its staff assessed the reported frauds, it failed to prove that there had been human intervention in the process, as the reviews were rather symbolic.

3.5. The protection of personal data: The use of smart video surveillance

On 19 May 2023, France enacted the legal framework for the 2024 Olympic and Paralympic Games (Law no. 2023–380), which includes provisions concerning different areas of the Games. One of the most significant provisions of this law refers to the implementation of enhanced security measures for the 2024 Olympic Games to prevent breaches of public order. Article 10 authorises the enforcement authorities to use intelligent video surveillance facilitated by artificial intelligence, which through 'augmented cameras' might detect 'predefined events' like suspicious behaviour, abandoned bags or crowd movements in real time. Moreover, images collected by authorised video protection systems may be subject to algorithmic processing. It is noteworthy to mention that limitations on the treatment of collected data were explicitly outlined in Article 10, i.e. the use of biometric identification systems, the processing of biometric data and the implementation of facial recognition techniques were prohibited. Interestingly enough, the aforementioned provision was considered by the French Constitutional Council (Conseil Constitutionnel), which in its decision of 17 May 2023 (No. 2023–850 DC 1217) declared that Article 10 of the Olympic and Paralympic Games Act 2024 is compatible with the Constitution. In its unprecedented decision, the Council held that to prevent breaches of public order, which is the constitutional objective, the algorithmic processing of images collected using a video surveillance system or cameras installed on aircraft is legal and valid. It was pointed out that such processing, along with a systematic and automated analysis of the collected images, considerably increases the quantity and precision of the information that can be extracted from them; therefore the implementation of such monitoring systems must be accompanied by specific guarantees to safeguard the right to respect for private life.

Conclusions

It can be stated without a doubt that the rapid development of AI has created many opportunities in almost every aspect of human life, including in the field of justice. As many scholars emphasise (Cabrera, 2024; Guitton et al., 2025; Simmons, 2018; Watamura et al., 2025; Yu, 2022), AI tools can facilitate court management and assist judges in office work, in the courtroom and in the judicial decision-making process, hence allowing them to focus on more complex legal reasoning. For example, in Taiwan, artificial intelligence is exploited to recognise Mandarin in court proceedings, to automatically identify factors which affect the degree of penalty (hence ensuring that sentences imposed comply with the principles of proportionality and equality), to analyse electronic documentation and allocate it to departments, or to provide citizens with instant answers to questions about the judicial system or court proceedings by means of intelligent customer service chatbots (Kuo, 2024).

Nevertheless, these rapid changes also raise serious legal and ethical concerns, among both authorities and the public, with respect to compliance with current regulations, standards and ethical guidelines (Fine et al., 2025; Franguloiu, 2023; John et al., 2023), the necessity of human oversight of AI-created output (Fine et al., 2025; McCown Jones, 2025) and risks and biases created and embedded in AI algorithms (Angwin et al., 2016; Josten, 2023; McCown Jones, 2025; Moore et al., 2023), as well as its transparency or lack of it. This is a field that definitely needs further investigation, as technology must work for us and not against (some of) us. With the present study, the author hopes to provoke some discussion of and further research into this area.

REFERENCES

Aletras, N., Tsarapatsanis, D., Preoţiuc-Pietro, D., & Lampos, V. (2016). Predicting judicial decisions of the European Court of Human Rights: A Natural Language Processing perspective. *PeerJ Computer Science*, *2*, e93. https://doi.org/10.7717/peerj-cs.93

Angwin, J., Larson, J., Mattu, S., & Kirchner, L. (2016, 23 May). *Machine bias*. ProPublica. https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing

Cabrera, B. M., Luiz, L. E., Cavalcante, D. L., & Teixeira, J. P. (2024). History of technological evolution in the Brazilian judiciary system and the application of artificial intelligence. *Procedia Computer Science*, *239*, 1188–1195.

Canadian Judicial Council. (2024, September). *Guidelines for the use of artificial intelligence in Canadian courts*. https://cjc-ccm.ca/sites/default/files/documents/2024/AI%20Guidelines%20-%20FINAL%20-%202024–09%20-%20EN.pdf

Conseil Constitutionnel (France). (2023, 17 May.) *Décision no. 2023–850 DC du 17 mai 2023*. https://perma.cc/8LC6-HW23

Council of Europe. (2024, 5 September). *Council of Europe framework convention on artificial intelligence and human rights, democracy and the rule of law*. https://rm.coe.int/1680afae3c

Council of the European Union. (2020, 9 June). *Council conclusions on shaping Europe's digital future*. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020XG*0616*(01)

Council of the European Union. (2020, 13 October). *Council conclusions: 'Access to justice – seizing the opportunities of digitalisation'*. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020XG*1014*(01)

Council of the European Union. (2023, 20 October). *Council conclusions on digital empowerment to protect and enforce fundamental rights in the digital age*. https://data.consilium.europa.eu/doc/document/ST-14309–2023-INIT/en/pdf

Council of the European Union. (2024, 5 March). *Conclusions on the application of the EU Charter of Fundamental Rights: Promoting trust through effective legal protection and access to justice*. https://data.consilium.europa.eu/doc/document/ST-7127–2024-INIT/en/pdf

Council of the European Union. (2024, 16 December). *Council conclusions (16933/24) on the use of artificial intelligence in the field of justice*. https://data.consilium.europa.eu/doc/document/ST-16933–2024-INIT/en/pdf

Courts and Tribunals Judiciary (UK). (2023, 12 December). *Artificial intelligence (AI): Guidance for judicial office holders*. https://www.judiciary.uk/wp-content/uploads/2023/12/AI-Judicial-Guidance.pdf

Courts and Tribunals Judiciary (UK). (2025, 15 April). *Artificial intelligence (AI): Judicial guidance*. https://www.judiciary.uk/guidance-and-resources/artificial-intelligence-ai-judicial-guidance/

Courts of New Zealand. (2023, 7 December). *Guidelines for use of generative artificial intelligence in courts and tribunals*. https://www.courtsofnz.govt.nz/going-to-court/practice-directions/practice-guidelines/all-benches/guidelines-for-use-of-generative-artificial-intelligence-in-courts-and-tribunals

European Commission. (2025, 4 February). *Commission publishes the guidelines on prohibited artificial intelligence (AI) practices, as defined by the AI Act*. https://digital-strategy.ec.europa.eu/en/library/commission-publishes-guidelines-prohibited-artificial-intelligence-ai-practices-defined-ai-act

European Commission for the Efficiency of Justice. (2019, February). *European ethical charter on the use of artificial intelligence in judicial systems and their environment*. https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c

European Parliament and Council of the European Union. (2016, 27 April). Regulation (EU) 2016/679 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation). https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679

European Parliament and Council of the European Union. (2024, 13 June). Regulation (EU) 2024/1689 Laying Down Harmonised Rules on Artificial Intelligence. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202401689

European Parliament. (2023, 19 October). *Shaping the digital transformation: EU strategy explained*. https://www.europarl.europa.eu/topics/en/article/20210414STO02010/shaping-the-digital-transformation-eu-strategy-explained

European Union Agency for Fundamental Rights. (2020, 14 December). *Getting the future right: Artificial intelligence and fundamental rights*. https://fra.europa.eu/en/publication/2020/artificial-intelligence-and-fundamental-rights

European Union Agency for Fundamental Rights. (2022.) *Bias in algorithms: Artificial intelligence and discrimination*. https://fra.europa.eu/sites/default/files/fra_uploads/fra-2022-bias-in-algorithms_en.pdf

FantasySCOTUS (n.d.). *FantasySCOTUS*. Retrieved 24 September 2025, from https://fantasyscotus.net/

Fine, A., Berthelot, E. R., & Marsh, S. (2025). Public perceptions of judges' use of AI tools in courtroom decision-making: An examination of legitimacy, fairness, trust, and procedural justice. *Behavioral Sciences*, *15*(4), 476. https://doi.org/10.3390/bs15040476

Franguloiu, S. (2023). Principles for the use of artificial intelligence (AI) in the judiciary as derived from the European Ethics Charter: Justice efficiency and limitations. *Bulletin of the Transilvania University of Braşov*, *16*(65). https://doi.org/10.31926/but.ssl.2023.16.65.3.5

Grupo de Trabalho sobre Inteligência Artificial no Poder Judiciário (Brazil). (2024, 12 December). *Resolution no. 332/2020 of the National Council of Justice (CNJ)*. https://www.cnj.jus.br/wp-content/uploads/2025/02/draft-ai-resolution.pdf

Guitton, C., Druta, V., Hinterleitner, M., Tamò-Larrieux, A., & Mayer, S. (2025). Adoption of artificial intelligence in the judiciary: A comparison of 28 advanced democracies. *Discover Artificial Intelligence*, *5*(169). https://doi.org/10.1007/s44163–025-00311-y

Heshmaty, A. (2022, 1 February). *Use of AI in law firms to predict litigation outcomes*. https://www.lexisnexis.co.uk/blog/future-of-law/using-ai-to-predict-litigation-outcomes

Jadhav, E. B., Sankhla, M. S., & Kumar, R. (2020). Artificial intelligence: Advancing automation in forensic science & criminal investigation. *Seybold Report*, *15*(8).

John, A. M., Aiswarya, M., & Panachakel, J. T. (2023). Ethical challenges of using artificial intelligence in judiciary in 2023. In *IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (MetroXRAINE)* (pp. 723–728). IEEE.

Josten, W. (2023). *Addressing bias in AI: Surveying the current regulatory and legislative landscape*. Thomson Reuters Institute. https://www.thomsonreuters.com/en-us/posts/technology/ai-bias-report-duke-law/

Judgment of the Federal Constitutional Court of Germany of 16 February 2023. https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2023/02/rs20230216_1bvr154719en.html

Judgment of the Gerechtshof Amsterdam of 4 April 2023, no. 200.295.742/01. https://uitspraken.rechtspraak.nl/details?id=ECLI:NL:GHAMS:2023:793&showbutton=true&keyword=ecli%253anl%253aghams%253a2023%253a793&idx=1

Judgment of the Verwaltungsgerichtshof of Austria of 21 December 2023. Ro 2021/04/0010–11 (DE). https://www.vwgh.gv.at/medien/mitteilungen/Ro_2021040010.pdf

Junta Electoral Central (Spain). (2025, 14 July). *Ley Orgánica 5/1985, de 19 de junio, del Régimen Electoral General*. https://www.juntaelectoralcentral.es/cs/jec/loreg/contenido

Kravetz, D. (2014, 14 July). *Algorithm predicts US Supreme Court decisions 70% of time*. ARSTechnica. https://arstechnica.com/science/2014/07/algorithm-predicts-us-supreme-court-decisions-70-of-time

Kuo, J. S. (2024). Wpływ sztucznej inteligencji na tajwańskie sądownictwo. *Iustitia*, *3*(4), 148–150.

Larson, J., Mattu, S., Kirchner, L., & Angwin, J. (2016, 23 May). *How we analyzed the COMPAS recidivism algorithm*. ProPublica. https://www.propublica.org/article/how-we-analysed-the-compas-recidivism-algorithm

McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (2016). A proposal for the Dartmouth summer research project on artificial intelligence (31 August 1955). In Jerry Kaplan (Ed.), *Artificial intelligence: What everyone needs to know* (p.1). Oxford University Press.

McCown Jones, E. (2025). Navigating AI hallucinations in the US legal system: Challenges and solutions. *Journal of Business and Behavioural Sciences*, *37*(1) pp. 90–99.

Moore, C., Ferguson, E., & Guerin, P. (2023, August). Pretrial risk assessment on the ground: Algorithms, judgments, meaning, and policy. *MIT Case Studies in Social and Ethical Responsibilities of Computing*. https://doi.org/10.21428/2c646de5.b016a7b3

Muller, C. (2020). *The impact of AI on human rights, democracy and the rule of law*. ALLAI. https://allai.nl/wp-content/uploads/2020/06/The-Impact-of-AI-on-Human-Rights-Democracy-and-the-Rule-of-Law-draft.pdf

Papp, D., Krausz, B., & Gyuranecz, F. Z. (2022). *The AI is now in session: The impact of digitalisation on courts*. https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ojs-doi-10_35467_cal_151833

Reiling, A. D. (2020). Courts and artificial intelligence. *International Journal for Court Administration*, *8*. https://doi.org/10.36745/ijca.343

République Française. (2023, 19 May). Loi no. 2023–380 du 19 mai 2023 relative aux jeux Olympiques et Paralympiques de 2024 et portant diverses autres dispositions. https://perma.cc/PX93–4XMH

Senado de España. (2024, 19 February). *Spanish Constitution*. https://www.senado.es/web/conocersenado/normas/constitucion/detalleconstitucioncompleta/index.html?lang=en

Shi, J. (2022). Artificial intelligence, algorithms and sentencing in Chinese criminal justice: Problems and solutions. *Criminal Law Forum*, *33*(2), 121–148. https://doi.org/10.1007/s10609–022-09437–5

Simmons, R. (2018). Big data, machine judges, and the legitimacy of the criminal justice system. *UC Davis Law Review*, *52*, 1067–1118. https://lawreview.law.ucdavis.edu/sites/g/files/dgvnsk15026/files/media/documents/52–2_Simmons.pdf

Spanish Constitutional Court. (2019, 22 May). *Sentencia 76/2019 (Official State Gazzete) number 151, of 25 June 2019*. https://hj.tribunalconstitucional.es/en/Resolucion/Show/25942#complete_resolucion&completa

Stănilă, L. M. (2020). *Artificial intelligence, criminal law and the criminal justice system: Memories about the future*. Universul Juridic Publishing House.

UNESCO. (2021.) *Recommendation on the ethics of artificial intelligence*. https://unesdoc.unesco.org/ark:/48223/pf0000380455

UNESCO. (2023). *Global toolkit on AI and the rule of law for the judiciary*. https://unesdoc.unesco.org/ark:/48223/pf0000387331

UNESCO. (2024). *Draft UNESCO guidelines for the use of AI systems in courts and tribunals*. https://unesdoc.unesco.org/ark:/48223/pf0000390781

UNESCO. (2024). *UNESCO global judges' initiative: Survey on the use of AI systems by judicial operators*. https://unesdoc.unesco.org/ark:/48223/pf0000389786

UNESCO. (n.d.) *Artificial intelligence and the rule of law*. Retrieved 24 September 2024, from https://www.unesco.org/en/artificial-intelligence/rule-law

United Nations General Assembly. (2024, 11 July). *Resolution adopted by the Human Rights Council on 10 July 2024*. https://documents.un.org/doc/undoc/gen/g24/120/36/pdf/g2412036.pdf

Watamura, E., Liu, Y., & Ioku, T. (2025). Judges versus artificial intelligence in juror decision-making in criminal trials: Evidence from two pre-registered experiments. *PLoS ONE*, *20*(1), e0318486. https://doi.org/10.1371/journal.pone.0318486

Yalcin, G., Themeli, E., Stamhuis, E., Philipsen, S., & Puntoni, S. (2023). Perceptions of justice by algorithms. *Artificial Intelligence and Law*, *31*(2), 269–292. https://doi.org/10.1007/s10506–022-09312-z

Yu, E. (2022, 12 December). *China wants legal sector to be AI powered by 2025*. ZDNET/innovation. https://www.zdnet.com/article/china-wants-legal-sector-to-be-ai-powered-by-2025/