

Legal Aspects of AI

Vladimír Smejkal

 <http://orcid.org/0000-0003-3933-2443>

Czech Technical University in Prague, Czech Republic

ABSTRACT

The article deals with the legal aspects of artificial intelligence. It responds to the intensive development of AI possibilities and tools, which are reflected in various social systems, including the field of law. It is necessary to examine individual aspects of AI and measure them from the point of view of the applicable legal order to determine whether the new possibilities of modern information technology do not require changes in the legal system. Due to the complexity of AI systems, this applies to both private and public law, which includes civil law, intellectual property law (copyright and industrial rights), personal data protection and personality protection law, and criminal law. Even overlaps in the area of administrative law cannot be ruled out, including establishing regulatory bodies that will oversee compliance with laws and ethical guidelines related to AI, or the awarding of public contracts for AI technologies. The article describes how the existing legal system can be applied to special issues related to AI systems and how the legal system could evolve further.

INTRODUCTION

The current extreme rise of AI-based technologies is generating more and more legal challenges. The main legal aspects related to AI are:

1. Data protection and privacy: AI systems often process large amounts of personal data, which raises questions about compliance with data protection laws such as GDPR. The aim is to ensure that AI systems comply with data protection laws, especially when processing sensitive (e.g. biometric) information.
2. Liability for damage caused by AI: Identify who is legally liable for damage or harm caused by AI—the developer, manufacturer, vendor, or user.
3. Intellectual property rights: Addressing issues related to industrial and copyright rights in AI-generated intellectual property works and the legality of using others' works in training AI models.
4. Protection from discrimination and human rights violations: Ensuring that AI systems do not discriminate or violate human rights in accordance with anti-discrimination laws and international conventions.

DOI: 10.4018/406032

5. Regulation of autonomous vehicles, drones, and other robots: Establishing legal frameworks for the safe and lawful operation of autonomous technologies in public space, including defining liability.
6. Criminal liability for AI actions: Examining how existing criminal laws apply to acts committed by AI and whether new legislation is needed.

PUBLIC AND PRIVATE LAW CONCERNING AI

In the field of legal aspects of AI, we can find both private and public law, as well as disciplines that have both a private and public law character. Contemporary legal doctrine understands the relationship between private and public law as a relationship between general and special law. Private law regulates the rights and obligations of rights subjects regardless of their specific nature in terms of their role in the exercise of public power (in this sense, in private law, the state has the same status as any other legal or natural person); in contrast, public law is such a subset of all legal relationships that is characterized by the fact that in a given legal relationship at least one of its subjects is an executor of public authority. In modern society, elements of public and private law are often intermingled so that it is impossible to unequivocally label all the activities of one or another institution as only public or private law. It is possible to imagine that a certain institution, depending on the nature of a particular activity, can act as a private-law entity in certain relationships, and as a public-law entity in others. Currently, and with a view to the future, the following areas of private and public law appear to be particularly relevant in the context of AI systems: constitutional law, civil law, intellectual property law, consumer protection law, employment law, administrative offense law, criminal law, and important aspects are “subsidiary” regulations such as cybersecurity laws or the EU GDPR. These areas of law play a key role in addressing current and future legal challenges associated with AI systems.

ARTIFICIAL INTELLIGENCE (AI) AND ITS CATEGORIES

For this post, the different categories of AI systems need to be defined. There are two quite different variants of AI, which are referred to as “strong” and “weak” AI, and which were already discussed by Turing:

- Computer functionalism also referred to as “strong” artificial intelligence (Strong AI), perceives AI as a model of human thought implemented in a software way based on the thesis “*The nature of the mind is algorithmic, and it is not important in what medium the algorithms (programs) are implemented.*” (Searle, 2003). According to Minsky (1967), “*Artificial intelligence is the science of creating machines or systems that will use such a procedure when solving a certain task that - if a person did it - we would consider it a manifestation of his intelligence.*” Artificial intelligence is, in principle, possible to replicate the human mind in a computer. So-called general artificial intelligence (AGI) systems should have the general ability to understand, learn, and apply knowledge to various tasks, similar to human intelligence, and make independent decisions in complex situations but nothing like that has happened so far and probably won't happen in the near future.
- In contrast, “weak” artificial intelligence (Weak AI) aspires only to modelling, partial manifestations of the mind while orienting itself to the highest, logical-symbolic level, which is thus the

26 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/legal-aspects-of-ai/406032

Related Content

Use of Contact Form in Development of Prosumer Innovations

Elbieta A. Wyslocka, Waldemar Szczepaniak, Renata Biadaczand Dariusz Wielgórka (2018). *International Journal of Ambient Computing and Intelligence* (pp. 67-77).

www.irma-international.org/article/use-of-contact-form-in-development-of-prosumer-innovations/205577

IoT Applications in Smart Home Security: Addressing Safety and Security Threats

Rohit Rastogi, Rishabh Jainand Puru Jain (2021). *Artificial Intelligence Paradigms for Smart Cyber-Physical Systems* (pp. 251-277).

www.irma-international.org/chapter/iot-applications-in-smart-home-security/266143

The Convergence of Big Data and AI Through Learning-Based Methods for Business Intelligence

Prasanna Rajbhandariand Richard S. Segall (2026). *International Journal of Artificial Intelligence (AI) in Business and Management* (pp. 1-33).

www.irma-international.org/article/the-convergence-of-big-data-and-ai-through-learning-based-methods-for-business-intelligence/400274

Emotional Intelligence in Higher Education: Humanising Technology for Holistic Student Development

Tiago Manuel Horta Reis da Silva (2025). *Humanizing Technology With Emotional Intelligence* (pp. 117-140).

www.irma-international.org/chapter/emotional-intelligence-in-higher-education/366691

Advancements in Modern Medicine: Innovations in Diabetes, Heart Failure, Infectious Diseases, and Cardiovascular Drug Therapies

Shakthivel C. D. (2024). *Clinical Practice and Unmet Challenges in AI-Enhanced Healthcare Systems* (pp. 97-122).

www.irma-international.org/chapter/advancements-in-modern-medicine/352914