

ppi 201502ZU4645

Esta publicación científica en formato digital es continuidad de la revista impresa  
ISSN-Versión Impresa 0798-1406 / ISSN-Versión on line 2542-3185 Depósito legal pp  
197402ZU34

# CUESTIONES POLÍTICAS

Instituto de Estudios Políticos y Derecho Público "Dr. Humberto J. La Roche"  
de la Facultad de Ciencias Jurídicas y Políticas de la Universidad del Zulia  
Maracaibo, Venezuela



Vol.40

N° 72

Enero

Junio

2022

# Legal regulation of artificial intelligence and robotic systems: review of key approaches

DOI: <https://doi.org/10.46398/cuestpol.4072.40>

*Dmitry Kuteynikov* \*

*Osman Izhaev* \*\*

*Valerian Lebedev* \*\*\*

*Sergey Zenin* \*\*\*\*

## Abstract

The aim of the article is to study various approaches to legal regulation of AI artificial intelligence and robotic systems in the European Union, USA, and China. These regions are the world's largest centers of technological development and therefore each of them has perfected a unique approach to legal regulation on the limits, scopes, and proper uses of AI. His achievements are widely used by other countries. The authors used the methods of analysis of scientific documents, laws, and legal regulations. In addition, this article reviews the basic conceptual approaches available in the world for the formation of legal regulation in the field of the use of AI and robotic systems. It is concluded that policies regulating artificial intelligence are not limited to one area and, in general, are intended to protect the rights and freedoms of citizens, regardless of the field of application of AI in the social order.

**Keywords:** artificial intelligence; robotics; legal status; human rights; technological innovations.

---

\* Kutafin Moscow State Law University, Moscow, Russia. ORCID ID: <https://orcid.org/0000-0003-1448-3085>

\*\* Kutafin Moscow State Law University, Moscow, Russia. ORCID ID: <https://orcid.org/0000-0003-3777-8927>

\*\*\* Kutafin Moscow State Law University, Moscow, Russia. ORCID ID: <https://orcid.org/0000-0002-7642-1325>

\*\*\*\* Tyumen State University, Tyumen, Russia; Kutafin Moscow State Law University, Moscow, Russia. ORCID ID: <https://orcid.org/0000-0002-4520-757X>

## *Regulación legal de la inteligencia artificial y los sistemas robóticos: revisión de enfoques clave*

### **Resumen**

El objetivo del artículo es estudiar varios enfoques de regulación legal de la inteligencia artificial IA y los sistemas robóticos en la Unión Europea, EE. UU. y China. Estas regiones son los centros de desarrollo tecnológico más grandes del mundo y, por lo tanto, cada una de ellas ha perfeccionado un enfoque único para la regulación legal sobre los límites, alcances y usos adecuados de la IA. Sus logros son ampliamente utilizados por otros países. Los autores utilizaron los métodos de análisis de documentos científicos, leyes y reglamentos legales. Además, el artículo revisa los enfoques conceptuales básicos disponibles en el mundo para la formación de la regulación legal en el campo del uso de la IA y los sistemas robóticos. Se concluye que las políticas que regulan a la inteligencia artificial no se limitan a un área y, en general, tienen como propósito proteger los derechos y libertades de los ciudadanos, independientemente del campo de aplicación de la IA en el orden social.

**Palabras clave:** inteligencia artificial; robótica; estatus legal; derechos humanos; innovaciones tecnológicas.

### **Introduction**

The legal and technical regulation of autonomous technologies is being discussed and developed. Many countries have adopted national strategies for developing artificial intelligence and robotics, which, among other things, contain general approaches to regulating their use. Currently, the legislators of many states who declare their intentions to become leaders in this area face an important task of selecting the concept of legal regulation to form their regulatory framework.

There are different approaches to regulation from the US, Europe, and China. On the one hand, these regions are the world's largest centers of technological development. On the other hand, each of them has developed a unique approach to the legal regulation of the above-mentioned relations.

### **1. Methods**

Author study the AI legal regulation and robotic systems in certain countries and regions (EU, USA, and China).

The first paragraph considers the legal framework for regulating the use of AI in EU countries. The main research object is the draft regulation “On harmonized rules on AI (AI Act) and amending certain union legislative acts”. The key idea of this document is to apply a risk-based approach in regulation, whose essence is to classify AI-driven systems into different categories depending on their potential threat to health, safety, and fundamental human rights.

The second paragraph examines the specific regulation of public relations and the use of AI systems in the US. Both at the federal and state levels, there are no cross-cutting laws that form a unified legal approach to regulating the area in question. This is a conscious legal policy based on the principle of “ad hoc” regulation that presupposes the regulation of social relations as they naturally develop.

The third paragraph dwells on the legal regulation of using AI in China. The main framework of legal regulation in the country is the “New Generation AI Development Plan” which defines the key goals and principles for developing this sphere of public relations. Despite ambitious concepts and the introduction of innovations, the development of legal regulation in the field of AI-driven and robotic systems is associated with political risks.

## **2. Results**

EU countries are about to adopt a unified end-to-end regulatory act that will affect different spheres of public relations. This regulation should utilize a risk-based approach focused on a person. In this connection, the main criterion is the potential threat posed by AI to individual rights. The advantage of such a regulatory system is that it is not limited to one area and, in general, aims at protecting the rights and freedoms of citizens regardless of the field of AI application. However, this also conditions a disadvantage associated with the fact that an excessive number of regulatory requirements for actors involved in the development, distribution, and use of AI-powered systems can significantly slow down the growth of the industry, which will have a negative impact (at least in economic terms) on the quality of life.

In the US, there are no cross-cutting laws that form a unified legal approach to regulating the area in question both at the federal and state levels. This is a conscious legal policy of the state based on the principle of “ad hoc” regulation that presupposes the regulation of social relations as they naturally develop. Thus, the regulatory legal acts adopted in the US are fragmented and not uniform from the semantic perspective. Legal regulation is not complex and affects certain spheres (for example, transport and medicine) or narrow issues (for instance, hiring discrimination) related to the development and functioning of AI-powered systems. This approach

is beneficial from an economic viewpoint since it does not imply the creation of a massive mechanism of legal regulation. At the same time, there is a risk that a significant number of incidents in the field of human interaction with AI-driven systems will occur before a sufficient regulatory framework is formed in the US.

In China, legal regulation is based on the “New Generation AI Development Plan” which defines the key goals and principles for developing this sphere of public relations. This concept represents only a general model and goals of future legal regulation. Accordingly, it should be considered in connection with other regulatory legal acts. On the one hand, China has adopted ambitious development concepts in the field of AI systems and robotics. This country introduces innovations into public life much more actively than the EU and US due to centralized regulation. On the other hand, their actual implementation is entrusted to private companies and local authorities, and the state retains ample opportunities for control in all spheres.

### **3. Discussion**

#### **3.1. Legal basis for regulating AI application in Europe: risk-based approach**

The EU is actively seeking its own way of developing AI (Straus, 2021). The European Commission is committed to implementing a set of policies aimed at stimulating the industry while respecting fundamental human rights. This body put forward three proposals to transform Europe into a space where innovations actively develop, ensure the safe use of technology, and support a favorable business environment. These proposals include: a) a legal framework for the regulation of AI; b) an approach to establishing accountability for AI-related incidents (planned for release in the last quarter of 2021 – first quarter of 2022); c) updating industry-specific legislation (e.g. safety regulations, the General Product Safety Directive – Q2 2021).

In the course of the study, we paid special attention to the legal concept embraced in a Regulation of the European Parliament and of the Council laying down harmonized rules on AI (AI Act) and amending certain union legislative acts issued in April 2021 (EUR-Lex, 2021). The key idea of this document is to apply a risk-based approach in regulation. It aims at classifying AI-driven systems into different categories, depending on their potential threat to health, safety, and fundamental human rights. Thus, AI-powered systems can be recognized as means that create: a) an unacceptable risk; b) a high risk; c) a low risk.

AI-powered systems with an unacceptable risk are completely prohibited because their use violates the universal values recognized by the EU. In particular, the use of various systems that affect the person's consciousness against their will is not allowed, namely, various manipulative techniques that address various groups of the population: children, seniors, persons with mental disorders, etc.

If the previous category does not cause any controversy, the next one is rather ambiguous. High-risk AI systems fall under a whole set of regulatory requirements and are allowed on the European market if they fully comply with them. The criteria for assigning a specific AI-driven system are their functional characteristics and goals. Within this group, they are divided into:

- a. AI systems to be used as a safety component of products subject to prior third-party conformity assessment.
- b. AI systems, whose exploitation can affect the state of human rights and whose list is indicated in a separate annex (for example, use in law enforcement, the administration of justice, or the field of democracy).

Such requirements represent a system of continuous risk management: monitoring, identifying, and assessing them with due regard to the available technical capabilities; thorough testing of these systems during development and before commission based on the purpose of a specific AI-powered system. Particular attention should be paid to data processing, i.e., information should be up-to-date, representative, correct and complete.

Finally, the third category includes low-risk AI systems that do not need any regulation. However, attention is drawn to the fact that responsible actors might comply with codes of ethics when creating, developing, and using such systems.

The use of AI systems raises legal issues at the level of national legislation in European countries. These issues concern, *inter alia*, human rights, confidentiality, fairness, algorithmic transparency, and accountability (Wachter *et al.*, 2021). Many states emphasize the need to assess the existing legal framework and enact new legislation to provide favorable legal conditions for the successful implementation and operation of AI-driven systems.

For example, Belgium adopted a Royal Decree on tests with automated vehicles in March 2018 (Belgisch Staatsblad, 2018). In 2017, a similar act was adopted by the Danish parliament that amended the road traffic law to allow tests of unmanned vehicles. In addition, Denmark has amended the Danish Financial Statements Act which stipulates that the largest companies adhering to data ethics policies must provide compliance information, while

companies that do not have a data ethics policy are required to explain why they do not have such a policy.

In 2020, Finland adopted a new law aimed at developing the smooth operation and safety of transport, creating the prerequisites for digitalization and automation of road traffic (Belgisch Staatsblad, 2020). The Netherlands also adopted and implemented regulations on self-driving vehicles, automated decision-making by law enforcement agencies, and the prevention of discrimination in employment when using automated systems (Government of the Netherlands, 2019). Finally, Lithuania passed a law on autonomous driving which allows driving cars without humans on board (Chancellery of the Seimas of the Republic of Lithuania, 2021).

Thus, countries start to develop industry-specific regulations for certain areas of AI that are currently not covered or insufficiently covered by the existing EU legislation. In this context, it is worth mentioning unmanned vehicle regulations. Many states have enacted regulations allowing the testing of unmanned vehicles and related technologies on public roads. Other significant areas of regulation are data (namely, in health care) and automated decision making. For example, Norway works on proposals to amend its health register to distinguish between the use of data for patient care and the rules for obtaining consent from individuals. Slovakia also prepares a new Act on Data to better define data protection rules, disclosure principles, data access, and open data rules.

In addition, many European states consider creating special legal regimes for experimentation with AI, for example, by developing regulatory sandboxes. While several EU member states have announced it in their national AI strategies, the overall development of regulatory sandboxes for AI is still insufficient.

Based on the foregoing, Europe is about to adopt a unified end-to-end regulatory act that will affect different spheres of public relations. This regulation should utilize a risk-based approach focused on a person. In this connection, the main criterion is the potential threat posed by AI to individual rights. The advantage of such a regulatory system is that it is not limited to one area and, in general, aims at protecting the rights and freedoms of citizens regardless of the field of AI application. However, this also conditions a disadvantage associated with the fact that an excessive number of regulatory requirements for actors involved in the development, distribution, and use of AI-powered systems can significantly slow down the growth of the industry, which will have a negative impact (at least in economic terms) on the quality of life.

### **3.2. Use of AI systems in the US: specific regulation of public relations**

In the US of America, there has been an increase in the number of AI regulations submitted to the federal legislature over the past few years. Thus, the 115<sup>th</sup> Congress (2017-2018) received 50 bills mentioning AI, and the 116th Congress (2019-2020) considered 175 (The United States Congress, 2021). This indicates a significant interest on the part of legislators to regulate this area. However, only seven of such bills were adopted and entered into force. In addition, these acts are not connected and are concerned with such different issues as funding, the development of scientific centers, defense, and international relations.

Currently, the sphere of AI is regulated by bylaws issued by executive authorities. The first document was the Executive Order of the President of the US of February 11, 2019, No. 13859 “Maintaining American Leadership in AI” (hereinafter referred to as the Order) (The White House, 2019). It defines five key principles to develop state policy in the field of developing AI. The Order formulates such principles of state policies as promoting the introduction of technological breakthroughs; the development of technical standards; the training of workers with skills in the development and application of AI technologies; protecting the American values, including civil liberties and privacy, increasing public confidence in AI technologies; developing an international environment to support US developments and open up new markets with due regard to the need to conceal technological advantages and critical AI-powered technologies from strategic competitors and rival countries.

Based on this Order, the Administration of the President of the US approved the Memorandum for the heads of executive departments and agencies in November 2020 (The White House, 2020). This document sets out the principles that should be followed by the executive authorities to develop normative and non-normative approaches to the implementation and operation of AI systems, both at general and sectoral levels. These principles are laid down in the following manner:

- Creating public confidence in AI systems.
- Public participation in decision-making.
- The use of the most objective and scientifically grounded information in the activities of executive authorities.
- The application of a risk-based approach in regulating the use of AI systems.
- Considering the benefits and costs of using AI systems.

- The use of result-oriented flexible approaches to regulation.
- Analyzing possible discriminatory consequences from the use of AI systems.
- Ensuring the transparency and accountability of decisions made by AI systems.
- Securing the functioning of AI systems at all stages.
- Implementing interdepartmental coordination between various government bodies.

Under this document, if the existing regulatory framework is sufficient for the use of a specific technological solution in the field of AI, or the development of new legislation is incommensurable with the predicted economic benefits of this solution, then its use should be stopped or replaced with non-regulatory approaches, including guidelines or programs for the implementation of public policies in certain sectors of the economy, pilot programs and experiments, and voluntary consensus standards and frameworks.

Following the entry into force of the President's Order, the House of Representatives adopted a Resolution "Supporting the development of guidelines for ethical development of AI" (The United States Congress, 2019). It contains tasks correlating with the provisions of the Order, whose implementation should be ensured: the interaction of industry, government, academic community, and civil society; the transparency and "expandability" of AI systems; empowering women and underrepresented or marginalized groups of society; information confidentiality and personal data protection; career opportunities for different social classes; the accountability and oversight of all automatic decision-making systems; life-long education in engineering, social sciences, and humanities; equitable access to technological services; the interdisciplinary research of safe and useful AI; the security and control of AI systems.

At the state level, the most regulated aspect of AI is the use of unmanned vehicles. More than half of the states have enacted legislation that, to one degree or another, allows the use of such vehicles on public roads (National Conference of State Legislatures, 2020).

Let us consider the existing laws in different states. Illinois passed the AI Video Interview Act (Illinois General Assembly, 2020), requiring employers to notify interviewees that AI might be used to assess them. Before the interview, they should get the consent of candidates, provide information on how AI works and what criteria are used to assess their professional suitability. Alabama has two laws that recognize the impact of AI technologies on the growing number of jobs in the state (Waggoner, 2019a) and set up a state commission on AI to review and advise on all

aspects of developing and using AI in various spheres (Waggoner, 2019b). California passed a law that requires each government agency to provide information to the public prior to approving a subsidy for the development of warehouse distribution centers, regularly report on the reduction or replacement of jobs due to automation to the Governor's Office of Business and Economic Development (Medina, 2019). By a 2019 law, the state of New York established an interim state commission to study the regulation of AI, robotics, and automation until December 2020 (Savino, 2019).

In 2021, more than 10 states introduced draft laws or parliamentary resolutions related to the regulation of AI. All of them are under consideration and are related to such issues as the development of AI (Alabama); the use of methods that minimize the risk of adverse consequences caused by the automated decision-making systems made by government bodies (California); tax benefits (Hawaii); establishing requirements for ensuring the fairness and transparency of automated decision-making systems used by government agencies, as well as the confidentiality of consumer data (Massachusetts); the verification of computer system algorithms and logical formulas used by the unemployment agency (Michigan); the prohibition of discrimination against certain categories of the population by automated decision-making systems (New Jersey); the establishment of a commission to oversee the impact of technology on the labor market and the state's economy as a whole (New York); the establishment of an advisory group to eliminate bias in government software (Vermont); the development of guidelines for public procurement and the use of automated decision-making systems to protect consumers and increase market transparency (Washington).

In the US, there are no cross-cutting laws that form a unified legal approach to regulating the area in question both at the federal and state levels. This is a conscious legal policy of the state based on the principle of "ad hoc" regulation that presupposes the regulation of social relations as they naturally develop. Thus, the regulatory legal acts adopted in the US are fragmented and not uniform from the semantic perspective. Legal regulation is not complex and affects certain spheres (for example, transport and medicine) or narrow issues (for instance, hiring discrimination) related to the development and functioning of AI-powered systems (Pasquale, 2019). This approach is beneficial from an economic viewpoint since it does not imply the creation of a massive mechanism of legal regulation. At the same time, there is a risk that a significant number of incidents in the field of human interaction with AI-driven systems will occur before a sufficient regulatory framework is formed in the US.

### 3.3. Concept of AI legal regulation in China

In July 2017, the State Council of the People's Republic of China announced a strategy for the development of AI called the "New Generation AI Development Plan". This strategy sets the national goal to become a global leader in AI by 2030 and to take a leading position in the development of AI-related regulatory frameworks, ethics, and standards. The concept represents only a general model and goals of future legal regulation. Accordingly, it should be considered in connection with other regulatory legal acts.

The concept determines three main stages in the development of China until 2030:

- By 2020, the AI industry's competitiveness will have entered the first echelon internationally. The AI development environment will be further optimized, opening new applications in important domains, and initially establishing AI ethical norms, policies, and regulations in some areas.
- By 2025, China will achieve breakthroughs in basic theories for AI so that some technologies and applications achieve a world-leading level. China will have seen the initial establishment of AI laws and regulations, ethical norms, and policy systems.
- By 2030, China's AI theories, technologies, and applications should achieve world-leading levels, making China the world's primary AI innovation center. China will have formed a more mature new-generation AI theory and technology system for meeting the challenges of technical development (China Science & Technology Newsletter, 2017).

According to a group of researchers from Oxford and the Alan Turing Institute, this concept was developed by the state but the actual implementation of these innovations and transformations will be carried out by the private sector and local authorities (Roberts *et al.*, 2021).

The Chinese regulation is also characterized by quick adaptation to new technological solutions in a wide market. In contrast to the above-mentioned countries, China actively uses unmanned vehicles on public roads in marked areas (Ziyan and Shiguo, 2021), is the first state to create automated Internet courts and a unified social rating system.

China approved the "Smart Car Innovation and Development Strategy" that defines several goals until 2025 (National Development and Reform Commission of China, 2020):

- The large-scale production of self-driving cars working in certain conditions or third-level automation cars.
- The deployment of level four autonomous cars for specific environments (robotic taxis, unmanned trucks, and commercial vehicles).
- Comprehensive standards for self-driving vehicles covering technological innovation, infrastructure, legislation, supervision, and network security.

China has achieved considerable results in the field of data protection. In 2016, the Cybersecurity Law of the People's Republic of China was adopted which established regulatory requirements like those of the EU and US. Since China is a state with an authoritarian political system, data confidentiality is more connected with the decisions of state authorities rather than with the creation of a unified legal framework supported by independent court decisions.

## **Conclusion**

Based on the results of the study, authors can conclude, an excessive number of regulatory requirements for actors involved in the development, distribution, and use of AI systems can significantly slow down the growth of the industry, which will negatively (at least in economic terms) affect the quality of life. A review of the US legislation has revealed that at the federal and state levels there are no cross-cutting laws that form a unified legal approach to regulating the area in question. Legal regulation is not complex and affects certain spheres (for example, transport and medicine) or narrow issues (for instance, hiring discrimination) related to the development and functioning of AI-powered systems.

On the one hand, this approach is beneficial from an economic viewpoint since it does not imply the creation of a massive mechanism of legal regulation. On the other hand, there is a risk of human rights violations. In China, ambitious development concepts have been adopted in the field of AI systems and robotics. This country introduces innovations into public life much more actively than the EU and US due to centralized regulation. In the process of adopting regulatory legal acts, the state reserves a lot of opportunities for unlimited participation in the activities of private companies and uses innovations to create a unified system of control over all spheres of public life.

This issue is common to other spheres of social and economic activity; therefore, the freedom of private and public organizations is severely limited by the state's interests. By adopting regulatory legal acts, the state

provides a lot of opportunities for unlimited participation in the activities of private companies and actively introduces innovations to create a unified system of control over all spheres of public life.

On the one hand, China has adopted ambitious development concepts in the field of AI systems and robotics. This country introduces innovations into public life much more actively than the EU and US due to centralized regulation. On the other hand, their actual implementation is entrusted to private companies and local authorities, and the state retains ample opportunities for control in all spheres.

### **Acknowledgments**

The reported study was funded by the Russian Foundation for Basic Research under research project No. 18-29-16193.

### **Bibliographic References**

- BELGISCH STAATSBLAD. 2018. Royal Decree on experiments with automated vehicles. Available online. In: [http://www.ejustice.just.fgov.be/mopdf/2018/04/19\\_1.pdf#Page15](http://www.ejustice.just.fgov.be/mopdf/2018/04/19_1.pdf#Page15). Date of consultation: 17/08/2021.
- BELGISCH STAATSBLAD. 2020. New Road Traffic Act enters into force on 1 June 2020. Available online. In: <https://www.lvm.fi/-/new-road-traffic-act-enters-into-force-on-1-june-2020-1194910>. Date of consultation: 17/08/2021.
- CHANCELLERY OF THE SEIMAS OF THE REPUBLIC OF LITHUANIA. 2021. Law of the Republic of Lithuania on Road Traffic Safety. Available online. In: <https://e-seimas.lrs.lt/portal/legalActEditions/lt/TAD/TAIS.111999>. Date of consultation: 17/08/2021.
- CHINA SCIENCE & TECHNOLOGY NEWSLETTER. 2017. Next Generation Artificial Intelligence Development Plan Issued by State Council. China Science & Technology Newsletter. Available online. In: <http://fi.china-embassy.org/eng/kxjs/PO20171025789108009001.pdf>. Date of consultation: 17/08/2021.
- EUR-LEX. 2021. Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts. Available online. In: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1623335154975&uri=CELEX%3A52021PC0206> Date of consultation: 17/08/2021.

- GOVERNMENT OF THE NETHERLANDS. 2019. Green light for Experimental Law for testing self-driving vehicles on public roads. Available online. In: <https://www.government.nl/latest/news/2019/07/02/green-light-for-experimental-law-for-testing-self-driving-vehicles-on-public-roads>. Date of consultation: 17/08/2021.
- ILLINOIS GENERAL ASSEMBLY. 2020. Artificial Intelligence Video Interview Act (820 ILCS 42/). Available online. In: <https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=4015&ChapAct=820%20AoILCS%2042/&ChapterID=68&ChapterName=EMPLOYMENT&ActName=Artificial%20Intelligence%20Video%20Interview%20Act>. Date of consultation: 17/08/2021.
- MEDINA, Jose. 2019. An act to add Section 53083.1 to the Government Code, relating to local government. Available online. In: [https://custom.statenet.com/public/resources.cgi?id=ID:bill:CA2019000A485&ciq=ncsl&client\\_md=04e7b31dafc05fbee86dcbe9ee2d5718&mode=current\\_text](https://custom.statenet.com/public/resources.cgi?id=ID:bill:CA2019000A485&ciq=ncsl&client_md=04e7b31dafc05fbee86dcbe9ee2d5718&mode=current_text). Date of consultation: 17/08/2021.
- NATIONAL CONFERENCE OF STATE LEGISLATURES. 2020. Autonomous Vehicles | Self-Driving Vehicles Enacted Legislation. Available online. In: <https://www.ncsl.org/research/transportation/autonomous-vehicles-self-driving-vehicles-enacted-legislation.aspx>. Date of consultation: 17/08/2021.
- NATIONAL DEVELOPMENT AND REFORM COMMISSION OF CHINA. 2020. Notice on the issuance of the «Smart car Innovation and Development Strategy». Available online. In: [https://www.ndrc.gov.cn/xxgk/zcfb/tz/202002/t20200224\\_1221077.html](https://www.ndrc.gov.cn/xxgk/zcfb/tz/202002/t20200224_1221077.html). Date of consultation: 17/08/2021.
- PASQUALE, Frank. 2019. “Data-Informed Duties in AI Development” In: *Columbia Law Review*. Vol. 119, No. 7, pp. 1917-1940.
- ROBERTS, Huw; COWLS, Josh; MORLEY, Jessica; TADDEO, Maria R; WANG, Vincent; FLORIDI, Luciano. 2021. “The Chinese approach to artificial intelligence: an analysis of policy, ethics, and regulation” In: *AI & Society*. Vol. 36, pp. 59-77.
- SAVINO, Diane J. 2019. An act creating a temporary state commission to study and investigate how to regulate artificial intelligence, robotics and automation; and providing for the repeal of such provisions upon expiration thereof. Available online. In: [https://custom.statenet.com/public/resources.cgi?id=ID:bill:NY2019000S3971&ciq=ncsl&client\\_md=2f7d69c27aee3b3970517293ccd2ccb4&mode=current\\_text](https://custom.statenet.com/public/resources.cgi?id=ID:bill:NY2019000S3971&ciq=ncsl&client_md=2f7d69c27aee3b3970517293ccd2ccb4&mode=current_text) Date of consultation: 17/08/2021.

- STRAUS, Joseph. 2021. "Artificial Intelligence-Challenges and Chances for Europe" In: *European Review*. Vol. 29, No. 1, pp. 142-158.
- THE UNITED STATES CONGRESS. 2019. H.Res.153 - Supporting the development of guidelines for ethical development of artificial intelligence. Available online. In: <https://www.congress.gov/bill/116th-congress/house-resolution/153/text>. Date of consultation: 17/08/2021.
- THE UNITED STATES CONGRESS. 2021. Official website. Available online. In: <https://www.congress.gov>. Date of consultation: 17/08/2021.
- THE WHITE HOUSE. 2019. Maintaining American Leadership in Artificial Intelligence. Available online. In: <https://www.govinfo.gov/content/pkg/FR-2019-02-14/pdf/2019-02544.pdf>. Date of consultation: 17/08/2021.
- THE WHITE HOUSE. 2020. Memorandum for the heads of executive departments and agencies. Available online. In: [www.whitehouse.gov/wp-content/uploads/2020/11/M-21-06.pdf](http://www.whitehouse.gov/wp-content/uploads/2020/11/M-21-06.pdf). Date of consultation: 17/08/2021.
- WACHTER, Sandra; MITTELSTADT, Brent; RUSSELL, Chris. 2021. "Why Fairness Cannot be Automated: Bridging the Gap between EU Non-Discrimination Law and AI" In: *Computer Law and Security Review*. Available online. In: <https://doi.org/10.1016/j.clsr.2021.105567>. Date of consultation: 17/08/2021.
- WAGGONER, James Thomas. 2019a. Recognizing Alabama's Technology and Growing Artificial Intelligence Job Sectors' Impact on the State's Economy. Available online. In: [https://custom.statenet.com/public/resources.cgi?id=ID:bill:AL2019000SJR45&ciq=ncl&client\\_md=bb713dbb453211342f79eed835dad1c&mode=current\\_text](https://custom.statenet.com/public/resources.cgi?id=ID:bill:AL2019000SJR45&ciq=ncl&client_md=bb713dbb453211342f79eed835dad1c&mode=current_text). Date of consultation: 17/08/2021.
- WAGGONER, James Thomas. 2019b. Establishing the Alabama Commission on Artificial Intelligence and Associated Technologies. Available online. In: [https://custom.statenet.com/public/resources.cgi?id=ID:bill:AL2019000SJR71&ciq=ncl&client\\_md=610424f9b68f56669d259f71528bfc54&mode=current\\_text](https://custom.statenet.com/public/resources.cgi?id=ID:bill:AL2019000SJR71&ciq=ncl&client_md=610424f9b68f56669d259f71528bfc54&mode=current_text). Date of consultation: 17/08/2021.
- ZIYAN, Chen; SHIGUO, Liu. 2021. "China's Self-Driving Car Legislation Study" In: *Computer Law and Security Review*. Available online. In: <https://doi.org/10.1016/j.clsr.2021.105555>. Date of consultation: 17/08/2021.



UNIVERSIDAD  
DEL ZULIA

---

# CUESTIONES POLÍTICAS

Vol.40 N° 72

*Esta revista fue editada en formato digital y publicada en enero de 2022, por el **Fondo Editorial Serbiluz**, Universidad del Zulia. Maracaibo-Venezuela*

[www.luz.edu.ve](http://www.luz.edu.ve)  
[www.serbi.luz.edu.ve](http://www.serbi.luz.edu.ve)  
[www.produccioncientificaluz.org](http://www.produccioncientificaluz.org)