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ARTIFICIAL INTELLIGENCE IN THE SECURITY STRATEGIES OF THE USA AND CHINA AT THE BEGINNING OF THE 21ST CENTURY – THE STRUGGLE FOR GLOBAL DOMINANCE**

Abstract

The development of artificial intelligence (AI) and its increasing application across various sectors of the state and society necessitates monitoring, studying, and actively adopting knowledge and conclusions on the subject across all scientific fields. In recent decades, we've observed a comprehensive use of AI in the security strategies of major powers like the United States and China, resulting in a sort of race in developing new technologies and their application. The first part of the paper defines AI, outlines various classifications, and focuses on its use in the security sector. We then analyze the security strategies of the USA and China to identify the role of AI and plans for its development in the global power struggle. Based on this, in the last part of the paper, we present the personalities and differences between the security strategies of the US and China.

Keywords: artificial intelligence, USA, China, security, strategy, Security Stategy

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INTRODUCTION

In recent decades, we have witnessed the rapid development of technologies, which requires active monitoring, analysis and adaptation of political, economic, business, military-technological, social and other systems of a state. Today, there is widespread talk about artificial intelligence, which inevitably affects all segments of the state and society, whether positive or negative aspects. Hence the need to analyze artificial intelligence multidimensionally, from the perspective of social, humanities, natural, technical, military and other sciences. This reflects the scientific justification for dealing with this topic, but no less social, since the development of artificial intelligence also concerns societies around the world.

Guided by the methodology from the general to the specific, the focus in this paper will be on artificial intelligence in the security strategies of the United States of America and China. These are the countries that are most actively developing artificial intelligence in the security sector, which is clearly highlighted in the security strategies that will be the subject of analysis. The intention is to present the key segments of artificial intelligence in the security strategies of the two countries, in order to point out the similarities and differences on this basis. We will use the method of analysis (descriptive role) to describe the research problem and explain (explanatory role) the key segments related to artificial intelligence in security strategies. Then, taking into account the described and explained phenomena and processes, we will strive to understand the complex whole using the synthesis method, primarily the potential of artificial intelligence within security strategies. Through a qualitative analysis of relevant domestic and foreign literature, available documents and reports, we will collect data related to the subject of research.

ARTIFICIAL INTELLIGENCE – CONCEPT AND DEFINITION

The American mathematician and computer scientist John McCarthy first used the term Artificial Intelligence – AI, to introduce it as an academic discipline in 1956 at a conference at Dartmouth College in the United States. According to McCarthy, AI is “the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers

to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable" (McCarthy 2007). Due to the complexity of the term, we encounter different explanations and interpretations of AI in the literature, especially when looking at different scientific research fields, which makes it difficult to specify the term and its meaning (Russell and Norvig 2010; Scherer 2016). This is understandable, given that AI is "an imitation or simulation of something that we ourselves do not yet fully understand: human intelligence" (Sheikh, Prins and Schrijvers 2023, 16). The High-Level Expert Group on Artificial Intelligence (AI HLEG) defines artificial intelligence as "systems that exhibit intelligent behavior by analyzing their environment and taking actions – with a certain degree of autonomy – to achieve specific goals" (High-Level Expert Group on Artificial Intelligence 2019). In order to understand AI more precisely, we also provide the following definition: "Artificial Intelligence technologies aim to reproduce or surpass abilities (in computational systems) that would require 'intelligence' if humans were to perform them. These include: learning and adaptation; sensory understanding and interaction; reasoning and planning; optimisation of procedures and parameters; autonomy; creativity; and extracting knowledge and predictions from large, diverse digital data" (McKendrick 2019, 6).

Therefore, AI has the ability to learn and adapt, reason and plan (Shalev-Shwartz and Ben-David 2014), with the aim of creating "learning system structures that will represent a self-learning system", without the need for a human to feed the machine with data strings (Radun 2025, 239). The phrase "machine learning" refers to machines capable of learning without the participation of the human factor in programming and filling in data (Smola and Vishwanathan 2008).

Artificial intelligence can be classified according to numerous criteria, which also depends on scientific disciplines and theoretical approaches (Luknar 2024). One of the basic criteria is the area in which AI is applied. Therefore, we can talk about: 1) specialized AI - used in certain areas; 2) general AI – as a general intelligence capability that can be applied in various fields (economy, business, education, medicine, military industry, etc.), and 3) super-intelligence (Kaplan and Haenlein 2018; Wang and Siau 2019).

Alex Bekker offered a more complex typology of AI:

1) interactive AI (example: personal assistants such as Siri, Cortana and Alexa);

2) functional AI (robots);
3) analytical AI (data analysis, machine learning);
4) textual AI (text recognition, speech-to-text conversion);
5) visual AI (augmented reality technology) (Bekker 2019).

The application of AI is becoming more widespread, both in the military and civilian sectors. Considering that the level of development of AI in the military sector is significantly higher than in the civilian sector, we can only assume what all the possibilities and its scope are. If we give examples of the combination of AI with other technological branches, we will see how ubiquitous it is in everyday life. By combining AI and robotics, intelligent robots capable of performing various tasks have been created, such as industrial robots, smart androids, actroids, robots in the military and police, as well as in medicine, pharmacology, and other fields (Despotović and Glišin 2024; Luknar 2024). AI is also an integral part of autonomous systems, such as unmanned aerial vehicles or drones, unmanned vessels, and unmanned land vehicles (Đorić and Glišin 2023).

ARTIFICIAL INTELLIGENCE IN THE SECURITY SECTOR AND SECURITY STRATEGIES

Artificial intelligence is becoming a central pillar of modern security strategies and is used in many ways in the security sector, especially when it comes to preserving the security state and the role of the military. Strategic documents include all aspects of the security state, and AI is a step further in analysis and prediction. With this in mind, AI is increasingly used in the analysis and processing of intelligence data, scenario assessment, strategy preparation, logistics and the conduct of combat operations, as well as in the protection and maintenance of systems. Thus, the advantages of AI and machine learning are reflected in: system autonomy, predictive analytics, cybersecurity and realistic simulation of combat operations and security threats (Cohen 2023; Ro 2023). We would highlight predictive analytics as one of the most important elements in the preparation of offensive and defensive actions (Chappell 2020; Márquez-Díaz 2024; Galán, Carrasco and LaTorre 2022).

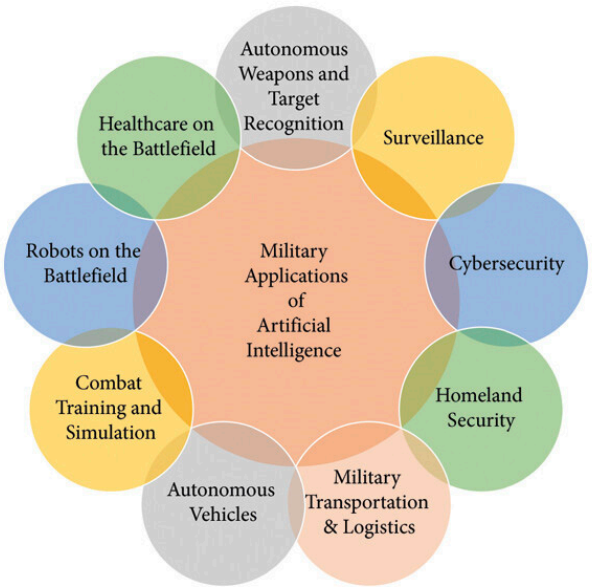
AI is also applied in the production of security and weapons systems, as well as in their upgrade, especially when it comes to unmanned aerial vehicles, robots and vessels (Evron and Bitzinger

2023). The most developed military powers such as the USA, China and Russia use AI to improve the accuracy and efficiency of military missions, the timeliness of defense and system protection, data processing and precision of actions on the battlefield. The US National Security Strategy document from 2022 states that technological superiority is key to national defense (White House 2022). China's position is the same, as they see the integration of AI as a path to strategic autonomy in the military-technological sector (Kania and Costello 2021).

The development of modern unmanned systems has contributed to the reduction of the use of human capacities, especially in security-risk situations and inaccessible areas. The advantage of autonomous weapons systems is their independence in actions, and this is especially evident in complex operations where human monitoring and guidance are not possible. The basic division of AOS is: 1. unmanned aerial vehicles; 2. unmanned underwater vehicles; 3. unmanned land vehicles and 4. combat robots (Đorić and Glišin 2023). The use of the aforementioned autonomous systems is multiple, since they have the ability to scout, recognize, process in real time and operate in different circumstances. For all the reasons listed above, AI has an increasingly important place in the strategic documents of major powers.

In contrast to AI in the civilian sector, AI in the security sector is significantly more advanced (Figure 1) (it is assumed to be 15 years or more ahead of its time) and is developed according to strict procedures and requirements (Despotović and Glišin 2024). The reliability of AI-based systems is very important, especially when they are exposed to hostile physical and cyber attacks (Gaba *et al.* 2024; Takpah and Oriakhi 2025). Then, a large data processing capacity is required, fast and accurate. Also, the autonomy of work without the need for human supervision and adaptability to different circumstances are very important items (Rashid *et al.* 2023). On the other hand, human-machine interaction in a security environment is necessary, so that the human factor makes a decision based on machine analysis in real time (Márquez-Díaz 2024; Balbaa and Abdurashidova 2024). Finally, interoperability, i.e. the ability of different systems to work together, is essential (Wegner 1996; Koncová and Kremeňová 2022). The application of AI in the defense sector is shown in Figure 1, which confirms the trend of increasingly widespread use of AI in almost all segments of military activities.

Figure 1. Applications of artificial intelligence in the defense sector



Source: Rashid *et al.* 2023.

AI in US security strategies

The United States has been investing the most money in research and development of technology globally since the end of World War II. This is especially true in recent decades, when the focus has been on technological innovations based on AI. The US budget for AI in 2025 is $470.9 billion, which is almost four times more than China, which is in second place with a budget of $119.3 billion (Spherical Insights 2025). If we look at the list of ten countries that allocate the most money for AI, we will see that the US invests more money than the other nine countries combined (Spherical Insights 2025). Therefore, the US attaches special importance to AI, which is also reflected in the security strategies that we will analyze below.

The United States established the American AI Initiative in 2019 by signing Executive Order 13859, which established an institutional framework for coordinating AI research and development in the civilian, military, and intelligence sectors. The document states: "Continued

American leadership in AI is of paramount importance to maintaining the economic and national security of the United States and to shaping the global evolution of AI in a manner consistent with our Nation's values, policies, and priorities" (Federal Register 2019). The American AI Initiative receives resources from the Federal Government so that it can implement projects in the field of new technologies. It is important to note that the AI development strategy involves several items. First, it is necessary to invest in research through cooperation between the state, industry, professors, scientists, international partners, and other entities with the aim of achieving global dominance in the field of AI. US President Donald Trump has proposed doubling funding for AI research and development for fiscal year 2021, which testifies to the importance of high-tech projects. Second, the American AI Initiative calls for increased funding and improved conditions for AI development (Federal Register 2019). Third, it is necessary to remove barriers to innovation in the field of AI. The White House has proposed the United States AI Regulatory Principles, "a first-of-its-kind national AI regulatory policy that advances innovation underpinned by American values" (Parker 2020). Fourth, it is important to promote American innovation in the field of AI globally, attract those countries that support the US, and open markets for the American AI industry. Fifth, incorporating proven and trusted AI into the government system to increase efficiency (Federal Register 2019). Sixth, training personnel to use AI in various sectors. Therefore, "these AI regulatory principles put our Nation on a path towards continued AI leadership, innovation, and discovery" (Parker 2020).

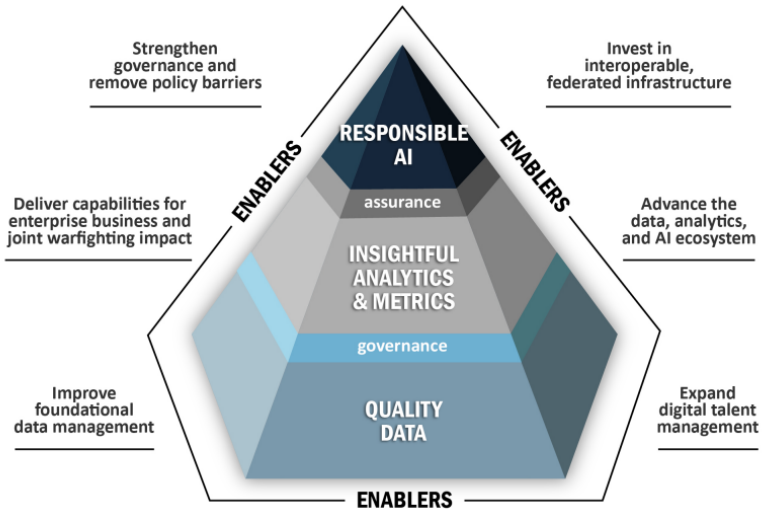
The National Security Commission on Artificial Intelligence (NSCAI) was established in 2018 to assess the impact of AI on US national security. The final report was published in 2021 and presents a detailed analysis of the strategy for using AI. At the very beginning of the report, the following is stated: "America is not prepared to defend or compete in the AI era" (NSCAI 2021, 1), which clearly indicates the need to create security strategies that will follow global trends in AI development. Technological advantage in the third decade of the 21st century is very easy to lose, especially if we take into account the rapid development of AI in China. In order for a country to prepare for the challenges of the AI era, it is important to recognize AI threats to national security, which is specifically stated in this report. Disinformation and propaganda, cyber attacks, misuse of AI in the field of biotechnology and the like are key areas that are recognized as

security threats. The report states that "the next major conflict will begin not with a military strike, but with disinformation and sabotage using AI tools" (NSCAI 2021, 24). As for cyber attacks, AI developments are becoming so accelerated that the human factor cannot keep up with the scale of security threats (NSCAI 2021, 33). With this in mind, the recommendation is to develop technical resilience of defense systems and algorithms for recognizing deepfake content. Also, "the U.S. must invest in automated cyber defense systems that incorporate AI in real-time detection and mitigation" (NSCAI 2021, 42). To achieve this, the need for developing a workforce that will be trained to use complex AI-based systems is emphasized. Also, institutional modernization, namely the modernization of command systems (Joint All-Domain Command and Control – JADC2) is necessary (Department of Defense [DoD] 2022).

A significant part of the final report is dedicated to China as a strategic challenge, precisely because it is rapidly developing cutting-edge AI-based systems. China is investing heavily in the Military-Civil Fusion (MCF) concept, which is key to rapid technological advancement in the field of military AI and maintaining national security (Dupont-Sinhsattanak 2025). "China is organized, resourced, and determined to win" the AI competition, the report states (NSCAI 2021, 6). One of the strategies for dealing with China's technological rise is the development of global cooperation in the field of AI. In addition, it is proposed to increase the budget from 2 billion in 2022 to 32 billion in 2026, in order to achieve superiority in research (NSCAI 2021, 193). "AI will not remain in the hands of allies. It will empower adversaries and shape geopolitics. We must act" (NSCAI 2021, 12).

The US Department of Defense adopted a major "Data, Analytics and Artificial Intelligence Adoption Strategy" in November 2023. The goal is to rapidly adopt advanced AI-based technologies to support and provide superiority to American warfighters on the battlefield. The strategy builds on and replaces the 2018 DOD AI Strategy (DoD 2019) and the revised 2020 DOD Data Strategy (DoD 2020), tracking AI trends and creating a foundation for future progress in the field (Clark 2023). The strategy prescribes an agile and efficient approach to the development and application of artificial intelligence, and its essence with a distinct hierarchy of processes and goals is represented by a pyramid (Figure 2).

Figure 2. Strategic Goals and the AI Hierarchy of Needs



Source: DoD 2023, 7.

In order to achieve the following decision-making advantages: "1. Superior battlefield awareness and understanding; 2. Adaptive force planning and application; 3. Fast, precise and resilient kill chains; 4. Resilient sustainment support; and 5. Efficient enterprise business operations" (DoD 2023; Clark 2023), the implementation of the presented (Figure 2) is necessary. The basis is high-quality and verified data, so that analytics can be further implemented on the basis of which the Ministry of Defense can make decisions. At the top of the pyramid is responsible AI, with the ultimate goal of improving mission results. Around the pyramid are segments that should enable the functioning of a complex decision-making system (DoD 2023).

On October 24, 2024, former US President Joe Biden signed the Memorandum "Advancing the United States' Leadership in Artificial Intelligence; Harnessing Artificial Intelligence to Fulfill National Security Objectives; and Fostering the Safety, Security, and Trustworthiness of Artificial Intelligence (NSM-25)", which is very significant for the role of AI in the context of national security, especially in the development of military capabilities, intelligence activities, and cybersecurity (White House 2024). The NSM identifies three goals: 1. encouraging the safe and secure development of artificial intelligence technologies, which means that systems must be resistant to hostile cyberattacks, 2.

advancing national security interests through the strategic deployment of artificial intelligence, and 3. promoting a global framework for the governance of artificial intelligence based on transparency, human rights, and trustworthiness (Bieber, Christensen and Hopkins 2024). The Memorandum emphasizes AI as a key component of modern military systems and national defense, with the ultimate goal of preventing hostile parties from harming US military and other capabilities. It envisages the accelerated development of AI, but also the introduction of stricter control and protection measures. NSM-25 is also a response to the global "arms race", which is particularly evident between the US and China in the domain of AI (White House 2024). In this context, Jake Sullivan said at the National Defense University in Washington: "We have to be faster in deploying AI... If we don't deploy AI more quickly... we risk squandering our hard-earned lead" (Reuters 2024). It is also important to mention the Chief Digital and Artificial Intelligence Office (CDAO) within the US Department of Defense, which is actively working on the development and incorporation of AI in the security sector. CDAO played a key role in the development of The Combined Joint All Domain Command and Control (CJADC2), with the goal of enabling a command-integration framework for connecting different systems and actors in real time using AI technology (DoD 2022). Thus, CJADC2 is a complex system that provides information to decision makers at the tactical, operational, and strategic levels. The US Department of Defense continues to develop CJADC2 in accordance with the strategic environment and concepts of warfare (CDAO 2025; Government Accountability Office 2025; DoD 2022). In addition, CDAO is developing multifunctional analytical tools (Advana, GAMECHANGER, JATIC) for collecting, analyzing, and testing data and AI models. Advana connects more than 400 systems, including tools, services, and analytics to enable data-driven decision-making in the Department of Defense (CDAO 2025). The Joint AI Test Infrastructure Capability (JATIC) is an analytical tool used to test AI models for Department of Defense programs, research laboratories, and the like, to ensure the operation of systems in the domain of national security (Martin 2025; CDAO 2025). In order to connect different systems and databases, CDAO has also offered Open Data and Applications Government-owned Interoperable Repositories (DAGIR).

We would also add to the list of innovations the AI Rapid Capabilities Cell project, launched in December 2024, which represents

the Department of Defense's effort to accelerate the application of AI in military operations. The domain of warfare includes the following: "Command and Control (C2) and decision support, operational planning, logistics, weapons development and testing, uncrewed and autonomous systems, intelligence activities, information operations, and cyber operations" (DoD 2024; CDAO 2024, 2025). When talking about the use of AI in warfare, it is necessary to mention Project Maven, which the US DoD launched in 2017 with the aim of accelerating the adoption of AI and machine learning in the military. The focus was primarily on processing field data and identifying potential targets and objects on the battlefield (Pellerin 2017).

Finally, we will note the announcement by US Secretary of Defense Pete Hegseth on the development of the National Defense Strategy (NDS), the deadline for the final draft is August 31, 2025. The NDS serves as a strategic map for the work of the Department of Defense, especially in the context of President Donald Trump's America First and Peace Through Strength agenda. The new Strategy prioritizes defending the United States, strengthening alliances, and deterring China in the Indo-Pacific (DoD 2025). The first Trump administration and the Biden administration have characterized China as the greatest threat to the United States (Horton and Natanson 2025), which will also be reflected in future rivalries.

AI in China's Security Strategies

China's rise in the last few decades has been largely driven by the rapid development of new technologies and AI, as clearly stated in numerous strategies and the direct involvement of the government. President Xi Jinping spoke at a session of the Communist Party of China in October 2016 about the development of new AI technologies and the challenges to state and national security. On that occasion, Jinping stated: "China must work toward its goal of becoming a cyber power by accelerating reinforcement of security and defense capabilities in cyber space, accelerating the promotion of social governance using IT, and accelerating the advancement of China's right to speak internationally and right to set rules governing cyber space" (Sen 2019). A month later, in November 2016, the Chinese government adopted the Cyber Security Law (Creemers, Webster and Triolo 2018), and in December of the same year adopted the National Cyber Security Strategy (Creemers 2016). In

March 2017, they adopted the International Strategy of Cooperation on Cyber Space (Shaohui 2017), thus demonstrating their proactivity in developing a cybersecurity doctrine with the aim of responding to global challenges and threats.

The cybersecurity strategy has three main drivers: economic, political and military. Therefore, the goals are clear: 1. maintaining economic growth and stability, "involves industrial economic cyber espionage of the US and other foreign targets" (Sen 2019, 129); 2. protecting the ruling power of the CCP, through information control and propaganda; 3. preparing for military scenarios and ensuring military superiority in the event of cyber conflict with the enemy through military modernization, research into computer network operations, and human capital development; 4. studying and understanding military infrastructure and preventing adversary actions in cyberspace (Sen 2019, 129).

On July 20, 2017, the Chinese State Council issued a seminal document, "A [New] Generation Artificial Intelligence Development Plan". This plan envisions a key role for AI in improving national security and global competitiveness, with the ultimate goal of China becoming a major global center for AI innovation by 2030 (State Council 2017; Webster *et al.* 2017). Thus, since 2017, China has considered AI a national strategic sector (Wu *et al.* 2020). Aware that AI is affecting and changing all segments of the state and society, China is actively using strategic opportunities for technology development to gain a global advantage in science and technology. The Plan emphasizes that AI is a "strategic technology that will lead the way in the future" (State Council 2017; Webster *et al.* 2017). Accordingly, China has set three strategic goals with time-bound targets in this Plan. The first is by 2020, when the overall technology and application of AI should be in line with the global level of progress. In addition, it is envisaged to develop a competitive AI industry in the global market. The second strategic goal for the period until 2025 predicts that China will establish a new generation of AI theories and technological systems, with the ability of autonomous learning. The volume of the core artificial intelligence industry will exceed 400 billion yuan. The third strategic goal by 2030 predicts that China's theories, technologies and applications of artificial intelligence will reach world-leading levels, making China the world's leading center for innovation in the field of artificial intelligence. The total economic effects of AI by 2030 are estimated at 10 trillion yuan

(about 1.38 trillion US dollars) (State Council 2017; Webster *et al.* 2017). The importance of the development of AI technologies in China is also evidenced by the growth in the number of companies engaged in this field. According to data from the Chinese Yicai Media Group in 2023, 1.09 million companies engaged in AI development were registered in China (Zhang and Khanal 2024, 22). In the period from 2020, there has been a continuous growth in the number of registered companies in this sector.

In addition to the above, the Plan also has a geopolitical dimension, as it perceives AI as a strategic resource in global competition. Thus, offensive and defensive AI capabilities are envisaged, especially in a military context (Allen and Chan 2017). More importantly, the Plan highlights the strategy of developing military-civilian integration, as a comprehensive approach to AI technology (State Council 2017; Webster *et al.* 2017). The growth in the number of newly registered companies in the field of AI demonstrates China's approach to comprehensive development in the civilian and military sectors, as well as their integration. In order to successfully implement the goals set in the aforementioned Plan, "China has undertaken a series of policy initiatives" since 2017, including "the integration of AI into national five-year science and technology plans, the Three-Year Action Plan to Promote AI (2018–2021), the AI Innovation Action Plan for Institutions of Higher Education" (Zhang and Khanal 2024), the establishment of state funds for the development of AI in various sectors (Bloomberg 2019; Zhu *et al.* 2023), and the like.

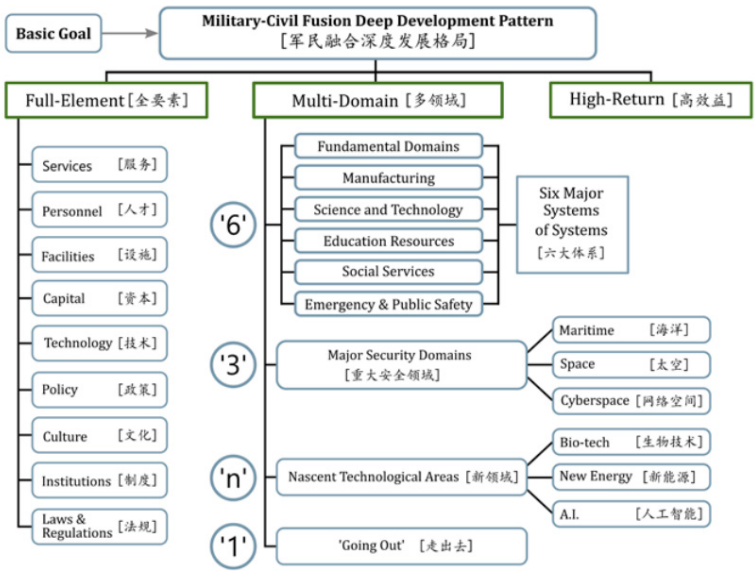
The Military Civil Fusion Strategy (MCF) has been a Chinese development concept for more than three decades, but since Xi Jinping came to power, this strategy has been increasingly mentioned and analyzed by American institutions and seen as a threat to global leadership. The 2024 US Department of Defense Annual Report addresses "military and security developments related to the People's Republic of China, providing an overview of the PRC's national, economic, and military strategy and providing insight into the strategy, current capabilities, and activities of the People's Liberation Army (PLA), as well as its future modernization goals" (DoD 2024, 5). Many authors consider the MCF to have a multi-decade historical evolution, from the period of Mao Zedong, then Deng Xiaoping, Jiang Zemin, and Hu Jintao, to Xi Jinping (Bhutani 2023; Bitzinger 2021; Stone and Wood 2020). In 2014, President Jinping elevated MCF to the level of a "national

strategy", considering it crucial for rejuvenating the Chinese nation and strengthening the military, and in 2015, he changed the development approach from "early-state fusion" to "deep fusion" (Bhutani 2023). Deep integration of the military and civilian sectors encompasses, on the one hand, all aspects of national defense and military-technological development, and on the other hand, strengthening the economic and social system, such as science, education, industry, and other aspects (Stone and Wood 2020).

President Jinping has recognized the great importance of the MCF, which is why he has made it the basis for other strategies and plans such as "Made in China 2025" "(MIC 2025), the 2017 New Generation Artificial Intelligence Development Plan (AIDP), and the People's Liberation Army (PLA) modernization plans to become a world-class military by 2049" (Bitzinger 2021; Wübbeke *et al.* 2016). He emphasized the importance of the MCF at the Central Commission for Military-Civil Fusion Development (CCMCFD) on June 20, 2017, when he said: "We must accelerate the formation of a full-element, multi-domain, and high-return military-civil fusion deep development pattern, and gradually build up China's unified military-civil system of strategies and strategic capability" (Bhutani 2023, 72). The above statement was analyzed by a group of researchers from the National Defense University of China and concluded that it presents short-term goals in its first part and long-term goals in its second part, which fits into the vision of global military dominance in 2049 (Bhutani 2023; Jinping 2023).

Some authors believe that the development of the MCF can have four positive outcomes. First, the development of the MCF can contribute to China's transformation into a powerful nation. Second, the MCF can help in gaining international advantage in the field of technology and the military. Third, the MCF is a unique opportunity to improve the governance system in China. Fourth, the "MCF supports the construction of a world-class military" (Stone and Wood 2020, 26–27). Also, the MCF is a key military-technological innovation strategy, especially in the context of AI and intelligentized warfare. "Intelligentized warfare is defined as the 'operationalization' of artificial intelligence (AI) and its enabling technologies, such as cloud computing, big data analytics, quantum computing, and autonomous systems, for military applications" (Bitzinger 2021, 7; Bitzinger, Evron and Yang 2021).

Figure 3. Military-civil fusion deep development pattern



Source: Stone and Wood 2020, 28.

The essence of MCF can be seen in Figure 4, as well as the development map that the Chinese authorities consistently adhere to. We have purposefully presented the patterns of deep development of military-civilian fusion, because they systematically show all those segments that are necessary to achieve the ultimate goal – global leadership. The three basic characteristics of MFC are: 1. "full-element; 2. multi-domain; 3. high-return. The first defines the types of resources shared by the military and civilian sectors" (Stone and Wood 2020, 28). Then, the second item highlights the priority fields for the development of MFC. Finally, the third item should show the desired effects from the development of MFC (29–38).

Finally, we will also list the most current document "White paper on national security", which was adopted in China in May 2025. The document discusses national security in the new era, which, in addition to military, includes political, economic, technological, cultural and cyber dimensions of security. It emphasizes a holistic approach to security as the first principle and strategic approach of China at the global level. "It is one that takes the people's security as its ultimate goal, political security as the fundamental task, and national interests as the guiding

principle" (Xinhua 2025). The document clearly shows the approach of the Chinese president, who often speaks about national and global security and the common future of humanity, which should ultimately contribute to the strategy of China's rejuvenation by 2049 (Glišin 2024).

CONCLUSION

Consideration of the security strategies of the United States of America and the People's Republic of China in the context of the application of artificial intelligence (AI) indicates deep-rooted differences in the institutional models, political priorities, normative approaches and global ambitions of these states. Although both states recognize AI as a central instrument in contemporary security concepts, differences in the structural and ideological framework of their strategies are crucial for understanding global technological competition in the 21st century.

The United States, in its strategic documents, openly emphasizes the need to maintain global superiority in the field of artificial intelligence as a means of improving national security, but also as an instrument of power projection. Thus, in several documents, such as the National Security Strategy (White House 2022), Executive Order 13859 (Federal Register 2019), NSCAI Final Report (NSCAI 2021), as well as in the most recent NSM-25 (White House 2024), the need for technological dominance, innovation, and the defense of democratic values in the digital age is consistently affirmed. The United States views AI not only as a defense and operational tool, but also as a comprehensive platform for the development of autonomous systems, cyber defense, predictive analytics, and for the construction of interoperable and resilient command systems (e.g. CJADC2 and AI Rapid Capabilities Cell). In its approach to AI development, the US also emphasizes partnerships with allied countries, the involvement of the private sector and the scientific community, with an emphasis on investing in talent.

On the other hand, China sees AI as a key element of its long-term national revival and global transformation of the international order. In China, AI is directly linked to the concept of national security, economic modernization, and geopolitical autonomy. According to documents such as the New Generation Artificial Intelligence Development Plan (Webster *et al.* 2017), the National Cyber Security Strategy (Creemers 2016), and the Military-Civil Fusion (MCF) strategy, China is integrating AI into all levels of state activity - from educational and industrial

capacities, to the army and control of the information space. Unlike the United States, the Chinese approach is centralized, directed by the Communist Party, and strongly relies on long-term planning and state investment in new technologies. China's strategy insists on technological sovereignty, internalization of production, and long-term integration of AI into the military, economic, and ideological spheres. The concept of intelligentized warfare, as well as the deep integration of military and civilian technology through MCF, represent an attempt to transform the very nature of warfare and conflict in the digital era. China's focus on strategic planning until 2049, when the PLA is planned to become a "world-class army", shows that AI is part of a much broader vision of national prestige and power.

Cybersecurity is a key area of application of artificial intelligence for both countries, especially when it comes to disinformation, protection of digital infrastructure, automation of systems for detecting and responding to deepfake content, digital sovereignty and other activities in cyberspace. Also, both countries see artificial intelligence as a tool for shaping the international system, and thus artificial intelligence, in addition to security competition, is also becoming a tool for geopolitics. In this regard, the US is making efforts to maintain the Extended Deterrence Strategy and to develop new military technologies to neutralize Chinese doctrines.

Finally, we can conclude that artificial intelligence represents a new axis of global security competition. Although both countries strive to develop technological superiority, the US and China differ in their concepts of security, degree of centralization, regulation, and attitude towards global governance. Understanding these differences is crucial for assessing future security scenarios, but also for creating policies that will ensure stability in an increasingly complex digital world. Regardless of their different approaches, both the US and China will continue to shape the global agenda regarding AI, which will affect all actors in the international system.

REFERENCES

Allen, Greg, and Taniel Chan. 2017. "Artificial intelligence and national security." *Belfer Center for Science and International Affairs*. July 1, 2017. https://www.belfercenter.org/publication/artificial-intelligence-and-national-security

Balbaa, Muhammad, and Marina Abdurashidova. 2024. "The impact of artificial intelligence in decision making: A comprehensive review." *EPRA international Journal of Economics* 11 (2): 27–38.

Bekker, Alex. 2019. "5 Types of AI to Propel Your Business." *Science Soft*. May 13, 2019. https://www.scnsoft.com/blog/artificial-intelligence-types

Bhutani, Rajeev. 2023. "China's Military-Civil Fusion and Lessons for India." *Synergy* 2 (1): 68–87.

Bieber, Corey, Guillermo Christensen, and Brian Hopkins. 2024. "AI National Security Memorandum Scopes Key Priorities." *The National Law Review*. December 3, 2024. https://natlawreview.com/article/ai-national-security-memorandum-scopes-key-priorities

Bitzinger, Richard. 2021. "China's Shift from Civil-Military Integration to Military-Civil Fusion." *Asia Policy* 16 (1): 5–24.

Bitzinger, Richard, Yoram Evron, and Zi Yang. 2021. "China's Military-Civil Fusion Strategy: Development, Procurement, and Secrecy." *Asia Policy* 16 (1): 1–64.

Bloomberg. 2019. "China to Funnel $29 Billion Towards its Chip Ambitions." *Bloomberg*. October 29, 2019. https://www.bloomberg.com/news/articles/2019-10-29/china-to-funnel-29-billion-towards-its-chip-ambitions

Chappell, Jim. 2020. *Artificial Intelligence: from Predictive to Prescriptive and Beyond*. Cambridge: Aveva.

Chief Digital and Artificial Intelligence Office [CDAO]. 2024. *Annual Report on AI Capabilities in Defense*. Washington, DC: U.S. Department of Defense.

Chief Digital and Artificial Intelligence Office [CDAO]. 2025. *CJADC2 Program Overview and Advana Architecture*. Washington, DC: U.S. Department of Defense.

Clark, Joseph. 2023. "DOD Releases AI Adoption Strategy." *U. S. Department of Defense*. November 2, 2023. https://www.defense.gov/News/News-Stories/Article/Article/3578219/dod-releases-ai-adoption-strategy/

Cohen, Charles. 2023. "AI in Defense: Navigating Concerns, Seizing Opportunities." *National Defense*. July 25, 2023. https://www.nationaldefensemagazine.org/articles/2023/7/25/defense-department-needs-a-data-centric-digital-security-organization

Creemers, Rogier. 2016. *National Cyberspace Security Strategy*. China Copyright and Media.

Creemers, Rogier, Graham Webster, and Paul Triolo. 2018. *Translation: Cybersecurity Law of the People's Republic of China*. Stanford: Stanford University.

Department of Defense (DoD). 2019. *DoD Artificial Intelligence Strategy: Harnessing AI to Advance Our Security and Prosperity*. Washington: Department of Defense U.S.

Department of Defense (DoD). 2020. *DoD Data Strategy*. Washington: Department of Defense U.S.

Department of Defense (DoD). 2022. *Summary of the Joint All-Domain Command and Control Strategy*. Washington: Department of Defense U.S.

Department of Defense (DoD). 2023. *Data, Analytics, and Artificial Intelligence Adoption Strategy*. Washington: Department of Defense U.S.

Department of Defense (DoD). 2024. *Annual Report on Military and Security Developments Involving the PRC*. Washington: Department of Defense U.S.

Department of Defense (DoD). 2025. *Statement on the Development of the 2025 National Defense Strategy*. Washington: Department of Defense U.S.

Despotović, Ljubiša, and Vanja Glišin. 2024. *Geopolitika i kriptopolitika*. Beograd: Catena Mundi.

Dupont-Sinhsattanak, Alexandre. 2025. "Modernizing a giant: assessing the impact of military-civil fusion on innovation in China's defence-technological industry." *Defence and Peace Economics*: 1–27. DOI: 10.1080/10242694.2025.2460458

Đorić, Marija, and Vanja Glišin. 2023. „Upotreba veštačke inteligencije u rusko-ukrajinskom sukobu." *Politika nacionalne bezbednosti* 25 (2): 59–76. DOI: 10.5937/pnb25-47369

Evron, Yoram, and Richard Bitzinger. 2023. *The Fourth Industrial Revolution and Military-Civil Fusion: A New Paradigm for Military Innovation?* Cambridge: Cambridge University Press.

Federal Register. 2019. "Executive Order 13859: Maintaining American Leadership in Artificial Intelligence (84 FR 3967)." *The Daily Journal of the United States Government*. February 11, 2019. https://www.federalregister.gov/documents/2019/02/14/2019-02544/maintaining-american-leadership-in-artificial-intelligence

Gaba, Shivani, Ishan Budhiraja, Vimal Kumar, Shesikala Martha, Jebreel Khurmi, and Akansha Singh [Gaba *et al.*]. 2024. "A Systematic Analysis of Enhancing Cyber Security Using Deep Learning for Cyber Physical Systems." *IEEE Access* (12): 6017–6035. DOI: 10.1109/ACCESS.2023.3349022

Galán, Jose Javier, Ramon Alberto Carrasco, and Antonio LaTorre. 2022. "Military Applications of Machine Learning: A Bibliometric Perspective." *Mathematics* 10 (9): 1397. DOI: 10.3390/math10091397

Glišin, Vanja. 2024. "A Leader with the Vision of the Shared Future of Humanity." *Progress* 5 (1): 153–157. DOI: 10.5937/napredak5-50218

Government Accountability Office. 2025. *CJADC2 Progress and Challenges*. Washington: GAO.

High-Level Expert Group on Artificial Intelligence. 2019. *A definition of AI: Main capabilities and scientific disciplines*. Brussels: European Commission.

Horton, Alex, and Hannah Natanson. 2025. "Secret Pentagon memo on China, homeland has Heritage fingerprints." *The Washington Post*. March 29, 2025. https://www.washingtonpost.com/national-security/2025/03/29/secret-pentagon-memo-hegseth-heritage-foundation-china/

Jinping, Xi. 2023. *On building a human community with a shared future*. Beograd: Albatros Plus.

Kania, Elsa, and John Costello. 2021. "Seizing the commanding heights: the PLA Strategic Support Force in Chinese military power." *Journal of Strategic Studies* 44 (2): 218–264. DOI: 10.1080/01402390.2020.1747444

Kaplan, Andreas, and Michal Haenlein. 2018. "Siri, Siri, in My Hand: Who's the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence." *Business Horizons* 62 (1): 15–25. DOI: 10.1016/j.bushor.2018.08.004

Koncová, Dominika, and Iveta Kremeňová. 2022. "Interoperability and Its Significance." *Transport and Communications* 10 (1): 6–9.

Luknar, Ivana. 2024. *Veštačka inteligencija: Izazovi i mogućnosti*. Beograd: Medija centar Odbrana.

Márquez-Díaz, Jairo Eduardo. 2024. "Benefits and Challenges of Military Artificial Intelligence in the Field of Defense." *Computación y Sistemas* 28 (2): 309–323. DOI: 10.13053/CyS-28-2-4684

Martin, Isaac. 2025. "Breaking Down the DOD's Chief Digital & AI Office Budget for FY25." *ExecutiveGov*. February 14, 2025. https://executivegov.com/article/breaking-down-dod-cdao-fy25-budget

McCarthy, John. 2007. "What Is Artificial Intelligence?" *Stanford University*. November 12, 2007. http://jmc.stanford.edu/artificial-intelligence/what-is-ai/index.html

McKendrick, Kathleen. 2019. *Artificial Intelligence Prediction and Counterterrorism*. London: Chatham House.

National Security Commission on Artificial Intelligence [NSCAI]. 2021. *Final Report*. Washington: NSCAI.

Parker, Lynne. 2020. "The American AI Initiative: The U.S. strategy for leadership in artificial intelligence." *OECD.ai*. June 11, 2020. https://oecd.

ai/en/wonk/the-american-ai-initiative-the-u-s-strategy-for-leadership-in-rtificial-intelligence

Pellerin, Cheryl. 2017. "Project Maven to Deploy Computer Algorithms to War Zone by Year's End." *U.S. Department of Defense News*. July 21, 2017. https://www.defense.gov/News/News-Stories/Article/Article/1254719/project-maven-to-deploy-computer-algorithms-to-war-zone-by-years-end/

Radun, Viktor. 2025. *Na putu ka transčoveku*. Beograd: Pešić i sinovi.

Rashid, Adib Bin, Karim Kausik, Alhamed Al Hassan Sunny, and Mehedy Hassan Bappy [Rashid *et al.*]. 2023. "Artificial Intelligence in the Military: An Overview of the Capabilities, Applications, and Challenges." *International Journal of Intelligent Systems* (4): 1–31. DOI: 10.1155/2023/8676366

Reuters. 2024. "White House presses gov't AI use with eye on security, guardrails." *Reuters*. October 24, 2024. https://www.reuters.com/world/us/white-house-presses-govt-ai-use-with-eye-security-guardrails-2024-10-24/

Ro, Christine. 2023. "On the warpath: AI's role in the defence industry." *BBC*. August 24, 2023. https://www.bbc.com/news/business-66459920

Russell, Stuart, and Peter Norvig. 2010. *Artificial Intelligence: A Modern Approach*. New Jarsey: Prentice-Hall.

Scherer, Matthew. 2016. "Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies." *Harvard Journal of Law & Technology* 29 (2): 354–398. DOI: 10.2139/ssrn.2609777

Sen, Gautam. 2019. "China's Cyber Security Strategy: Global Implications." *Scholar Warrior*, *Spring* 2019: 128–134.

Shalev-Shwartz, Shai, and Shai Ben-David. 2014. *Understanding Machine Learning: From Theory to Algorithms*. Cambridge: Cambridge University Press.

Shaohui, Tian. 2017. "International Strategy of Cooperation on Cyberspace." *Xinhua*. March 1, 2017. http://www.xinhuanet.com//english/china/2017-03/01/c_136094371.htm

Sheikh, Haroon, Prins Corien P, and Erik Schrijvers. 2023. *Mission AI: The New System Technology*. London: Springer.

Smola, Alex, and S. V. N. Vishwanathan. 2008. *Introduction to Machine Learning*. Cambridge: Cambridge University Press.

Spherical Insights. 2025. "Top 10 Artificial Intelligence Spending Countries in 2025: Statistics and Facts Analysis 2024 to 2035." *Spherical Insights*. May, 2025. https://www.sphericalinsights.com/blogs/top-10-artificial-intelligence-spending-countries-in-2025-statistics-and-facts-analysis-2024-to-2035

State Council. 2017. *A [New] Generation Artificial Intelligence Development Plan*. Beijing: State Council.

Stone, Alex, and Peter Wood. 2020. *China's Military-Civil Fusion Strategy*. Alabama: China Aerospace Studies Institute.

Takpah, Nathalie Essi Afefa, and Victor Oriakhi. 2025. "Cybersecurity Challenges and Technological Integration in Military Supply Chain 4.0." *Journal of Information Security* 16 (1): 131–148. DOI: 10.4236/jis.2025.161007

Wang, Weiyu, and Keng Siau. 2019. "Automation, Robotics, Future of Work and Future of Humanity: A Review and Research Agenda." *Journal of Database Management* 30 (1): 61–79. DOI: 10.4018/JDM.2019010104

Webster, Graham, Rogier Creemers, Elsa Kania, and Paul Triolo [Webster *et al.*]. 2017. *Translation: China's New Generation Artificial Intelligence Development Plan*. Stanford: Stanford University.

Wegner, Peter. 1996. "Interoperability." *ACM Computing Surveys* 28 (1): 285–287.

White House. 2022. *National Security Strategy of the United States*. Washington: White House.

White House. 2024. *National Security Memorandum on Artificial Intelligence (NSM-25)*. Washington: White House.

Wu, Fei, Cewu Lu, Ming-Li Zhu, Hao Chen, Jun Zhu, Kai Yu, Lei Li, Ming Li, Qian Chen, Xi Li, Xudong Cao, Zhongyuan Wang, Zhengjun Zha, Yueting Zhuang, Yunhe Pan [Wu *et al*.] 2020. "Towards a new generation of artificial intelligence in China." *Nature Machine Intelligence* 6 (2): 312–316.

Wübbeke, Jost, Mirjam Meissner, Max Zenglein, Jaqueline Ives, and Bjorn Conrad [Wübbeke *et al.*]. 2016. *Made in China 2025: The making of a high-tech superpower and consequences for industrial countries*. Berlin: MERICS.

Xinhua. 2025. *China releases white paper on national security*. Beijing: The State Councile of China.

Zhang, Hongzhou, and Shaleen Khanal. 2024. "To Win the Great AI Race, China Turns to Southeast Asia." *Asia Policy* 19 (1): 21–34.

Zhu, Julie, Kevin Huang, Yelin Mo, and Roxanne Liu [Zhu *et al.*]. 2023. "Exclusive: China to launch $40 billion state fund to boost chip industry." *Reuters*. September 5, 2023. https://www.reuters.com/technology/china-launch-new-40-bln-state-fund-boost-chip-industry-sources-say-2023-09-05/

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ВЕШТАЧКА ИНТЕЛИГЕНЦИЈА У БЕЗБЕДНОСНИМ СТРАТЕГИЈАМА САД И КИНЕ НА ПОЧЕТКУ 21. ВЕКА – БОРБА ЗА ГЛОБАЛНУ ПРЕВЛАСТ**

Резиме

Развој вештачке интелигенције (ВИ) и све учесталија примена у различитим сегментима државе и друштва доводи до тога да је неопходно праћење, изучавање и активно усвајање знања и закључака о томе, на нивоу свих научних области. Последњих неколико деценија приметна је свеобухватна примена ВИ у безбедносним стратегијама великих сила попут Сједињених Америчких Држава и Кине, те због тога сведочимо својеврсној трци у развоју нових технологија и њиховој примени. Фокус је на државама које најактивније развијају вештачку интелигенцију у безбедносном сектору, што је јасно истакнуто у безбедносним стратегијама које ће бити предмет анализе, али имају и различите концепције безбедности, степен централизованости, регулативе и однос према глобалном управљању, што оправдава упоредну анализу и доприноси научној дебати. У првом делу рада дефинисаћемо ВИ, навешћемо различите поделе и фокусираћемо се на употребу ВИ у безбедносном сектору. Затим ћемо анализирати безбедносне стратегије САД и Кине, како бисмо лоцирали улогу ВИ и планове за будући развој и борбу за глобалну превласт. На основу тога у последњем делу рада предочићемо сличности и разлике између безбедносних стратегија САД и Кине. У раду примењујемо методу анализе (дескриптивна улога) са циљем да се опише проблем истраживања и објасне (експланаторна улога) кључни сегменти који се тичу вештачке

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интелигенције у безбедносним стратегијама. На основу описаних и објашњених појава и процеса, настојаћемо да методом синтезе разумемо сложену целину, пре свега потенцијале вештачке интелигенције у оквиру безбедносних стратегија. Квалитативном анализом релевантне домаће и стране литературе, доступних докумената и извештаја прикупићемо податке у вези са предметом истраживања.

Кључне речи: вештачка интелигенција, САД, Кина, безбедност, стратегија, Безбедносна стратегија

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