

THE PROBLEMS AND REGULATORY CHALLENGES BROUGHT ABOUT BY THE RAPID DEVELOPMENT OF ARTIFICIAL INTELLIGENCE

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The rapid development of artificial intelligence technology and the awakening of its autonomous consciousness have brought surprising changes, but also brought new problems. Can today's regulatory measures meet the regulatory needs of artificial intelligence in a timely manner, and how to make better use of artificial intelligence benefits, preventing it from becoming a new generation of powerful weapons.

Keywords: artificial intelligence; machine learning; GPT; autonomous consciousness; international legal framework; AI weapons; AI governance.

ПРОБЛЕМЫ И НОРМАТИВНЫЕ ВЫЗОВЫ, ВЫЗВАННЫЕ БЫСТРЫМ РАЗВИТИЕМ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА

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Быстрое развитие технологии искусственного интеллекта и пробуждение его автономного сознания принесли удивительные изменения, но также и новые проблемы. Могут ли сегодняшние меры регулирования своевременно удовлетворить нормативные потребности искусственного интеллекта и как лучше использовать преимущества искусственного интеллекта, не позволяя ему стать мощным оружием нового поколения.

Ключевые слова: искусственный интеллект; машинное обучение; GPT; автономное сознание; международная правовая база; ИИ-оружие; управление ИИ;

Artificial intelligence is a branch of computer science that focuses on creating intelligent programs that can think and learn like humans. Since its formal introduction in 1956, AI technology has developed for decades, and

what was once an obscure field has become the foundation of many modern technologies, including speech assistants, chatbots, autonomous cars, and facial recognition software [1].

Today, one of the most representative natural language processing models, the Generative Pre-Trained Transformer (GPT), has developed into a powerful 4.0 version with knowledge, creativity, logical and language organization abilities that are equal to or even surpass those of ordinary humans. The possible prediction is that the 5.0 version will be launched in several months, and the upgrade of GPT5.0 will be enormous [2]. It may become an all-round AI in a certain sense and may even develop autonomous consciousness. This is a dangerous signal [3].

As artificial intelligence continues to develop and even awaken to autonomous consciousness, it will bring a series of problems, such as copyright, ethical, network security, and information security issues, as well as more serious social problems, such as the safety of energy facilities, production facilities, and transportation equipment, etc. These safety issues will be multi-level and comprehensive [4]. In addition, an AI program with autonomous consciousness may be transformed into a fully autonomous weapon used for war or terrorist attacks, posing a huge threat to human peace and security [5].

In the face of the emerging challenges brought about by the development of artificial intelligence, many laws, regulations, and organizations have been introduced worldwide and regionally to deal with them. For example, the Global Partnership on AI (GPAI) was proposed in 2018 and launched in 2020. The United Nations Office on Drugs and Crime (UNODC) and the International Criminal Police Organization (INTERPOL) have jointly released reports on the application of AI and robots in law enforcement and the move towards responsible AI innovation. Canada, the United States, China, the United Kingdom, and the European Union have issued many regional strategic plans and laws and regulations related to artificial intelligence, making progress in guiding the development of AI and addressing security issues. However, these published laws and regulations do not have a significant effect on restricting the use of general artificial intelligence or autonomous AI weapons [6].

«International humanitarian law» is an international legal framework that regulates the conduct of war, including provisions that restrict the use of certain weapons systems. However, this legal framework does not explicitly address the use of AI weapons. Some international conventions have attempted to limit the use of autonomous weapon systems, such as the «CCW Convention» and the «Protocol on Explosive Remnants of War» These conventions emphasize human control and responsibility over military action and warfare, and propose measures to limit weapons similar to autonomous weapon systems. However, these provisions do not fully apply to AI weapons.

The emergence of AI weapons poses unprecedented threats to modern warfare, and therefore, the international community must explore in depth how to limit the use of these weapons. In addition, to ensure that the use of AI weapons complies with ethical and humanitarian standards, and is only used in lawful military operations, we need to establish a new international legal framework that requires extensive cooperation among governments, scientists, technology experts, and military experts. We must make full use of existing international organizations and mechanisms, such as the United Nations and the International Red Cross. Only through global cooperation and joint efforts can we develop a practical, sustainable, and fair legal framework to protect our world and humanity.

At the same time, this need is extremely urgent, especially in the current rapid development of artificial intelligence. If action is not taken to accelerate the development of relevant legal frameworks, AI weapons are likely to appear on the battlefield before laws are enacted, and this is not an alarmist view.

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