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ARTIFICIAL INTELLIGENCE AT THE INTERSECTION OF TECHNOLOGICAL PROGRESS AND HUMAN VALUES

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Abstract: The article examines the role of artificial intelligence (AI) in modern society not only from the perspective of its technical capabilities, but also in terms of its intersection with human morality, ethical norms, and emotional intelligence. The study analyzes AI's achievements in automating economic production and manufacturing processes, as well as issues such as unemployment, social inequality, and information security. Furthermore, it is argued that AI cannot fully replace human reason and creativity, and that it is merely a tool controlled by humans. The article provides scientific and theoretical justification for the necessity of aligning AI with human values.

Keywords: artificial intelligence (AI), economic inequality, ethical issues, human values, technological development, unemployment, morality, society, globalization, social philosophy, technology, economics, politics, culture, ethics, influence, development, problem, solution, control, norms, human interests.

Technological development has reached unprecedented speeds in the 21st century. Precisely in this era, artificial intelligence (AI) has become not merely an achievement in engineering and information technology, but an event that has transformed the entire mode of thinking of human civilization. From medical diagnostics to autonomous transport systems, from corporate management to the production of everyday consumer goods – AI is increasingly replacing human labor or significantly simplifying it across many fields.

However, like every technological achievement, artificial intelligence also has its negative aspects. Automation threatens the professional activities of tens of millions of people; the risk of losing control over data is becoming a genuine reality; and most importantly, the ethical foundations of AI decisions and their impact on the human psyche have become the center of philosophical debate. From this perspective, the present article analyzes artificial intelligence's place in society in the context of its socio-economic benefits alongside its potential threats to the moral and ethical world of human beings.

To address the above problems, it is necessary to conduct a deep socio-philosophical analysis of AI's influence on global processes, to monitor AI's development, to develop its ethical and legal norms, and to ensure that it is used in a manner that serves human interests. This, in turn, serves the sustainable development of society and improving the welfare of human beings. The development of artificial intelligence comes hand in hand with easing human labor and increasing intellectual capacity. Clear examples of this can be seen in AI's achievements across various fields. AI has made notable advances particularly in creating programs for complex games such as chess and checkers. In 1974, the "Kaissa" chess program (A. Arlazarov, M. Donskoy, A. Uskov, A. Bitman) won the world

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championship. "Kaissa's" victory caused a great sensation. Artificial chess machines, based on formal logic, yielded good results for formally structured problems, but failed to reflect real-world systems.

Another important application of AI can be seen in the field of machine translation. The first translation programs – the first experimental translation system from Russian, English, and Chinese – were created between 1954 and 1957. In 1954, under the leadership of IBM Corporation professor L. Dostert, a dictionary of 250 word pairs and six grammatical rules was used to achieve the artificial translation of sixty Russian words and phrases into English. The fundamental content of the translation demonstrated the computer's language rules and ability to solve problems in translation. Seventy years later, thanks to AI's rapid development, AI is now pioneering the writing of "bestseller" works [1].

Half a century ago, when mathematical linguistics had just been established, today, during the process of communication, a device called "Galaxy S24" has been created that "reconciles" linguistic conflicts through automatic speech translation. According to the conclusions of cybernetics experts at the UN, in the 21st century a new generation of AI technologies has emerged that can view the world's face – specifically "deepfakes", that is, audio, photo, and video materials created with the help of neural networks that are nearly indistinguishable from the originals, as well as modern technological tools capable of cloning voices, which have reached the peak of their development.

In 1960, a program for solving "universal problems" was created, enabling complex tasks such as automatically proving theorems in planimetry and finding solutions to algebraic problems. In 1963, the first language for the functional programming of AI tasks was developed by John McCarthy [2], and from 1970 onward, "expert" systems and the logic programming language "Prolog" emerged as the second wave of AI.

In the 1980s, the first "intelligent tutors" were created. A student could ask a tutor any question and engage in a live conversation with the tutor. This, of course, became a cause for concern among specialists who foresaw AI's future, as the collapse of many professions in the future was predicted. Today, among developing economies and low-income countries, the share of jobs that AI could potentially impact stands at 40 and 26 percent respectively. Although labor markets have less initial exposure to AI, they are potentially less productive from an efficiency standpoint [3].

In 1869, according to data from Goldman Sachs, the world's largest investment bank and financial conglomerate founded in New York, the development of cybernetic technology and the expansion of AI capabilities could lead to 300 million people worldwide becoming unemployed [4].

The disruption of the global labor market – where two-thirds of jobs are being automated, i.e., taken over by AI – is explained by this fact. Two versions emerge from this: if technological development progresses too slowly, jobs will be reduced but new professions and new job opportunities will be created, resolving the problem. On the other hand, AI's ability to master new jobs and new professions faster and more perfectly than humans leads to unemployment and a several-fold increase in human degradation.

In my view, there is hardly a field, profession, or specialty that AI has not entered. This is not just about physically demanding professions and fields. AI has penetrated not only fields requiring physical labor, but also creative and intellectual fields – from drawing imagined images to managing entire industries – so it is no surprise that they have rapidly fallen within AI's domain.

AI's impact on professions is described as follows [5]:

Profession / Field	**AI Impact %**
Building and grounds cleaning and maintenance	1%
Education, technical service	4%
Handicraft and detailed trade workers	4%

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Construction and extraction	6%
Factory and machine operators and assemblers	7%
Manufacturing	9%
Transportation and moving services	11%
Food preparation and serving related	12%
Personal care and service	19%
Arts, design, sports and media	26%
Library and reading	27%
Healthcare	28%
Protective services	28%
Farming, fishing and forestry	28%
Computer and mathematics	29%
Community and social services	33%
Business and finance	35%
Biology, physics and social sciences	36%
Architecture and engineering	37%
Legal	44%
Office, management, marketing	46%

The most alarming situation is that AI is heading straight for the most valuable professions. Professions that require no study or research have been left outside AI's scope.

From this it follows that by 2025-2030 compared to 1980, AI technologies will impact 60 percent of jobs in the field [6]. In my view, if half of jobs are negatively impacted by AI, the remainder will benefit from mastering new technologies – that is, even though the development of AI technologies is "reactive" in pace, it will open great opportunities in the future.

Global processes have created conditions for the formation of new professions on a global scale. Within the last five to eight years, new professions have emerged in the labor market: copywriter, programmer, SMM manager, marketer, graphic and 3D designer, blogger, IT specialist, creative copywriter, Full Stack (WordPress) developer, call-center operator, mobilographer, targetologist, Adobe Illustrator, Photoshop and Corel Draw designer, sales and content manager, showroom manager, office administrator, web designer, multilingual dispatcher, videographer, editor, Excel and Google Docs specialist, YouTube content creator, SMM project brand manager, marketing manager, PHP, MySQL, JavaScript, HTML, CSS developers, IT recruiter, reels and stories content creator, motion designer, PostgreSQL, Python, Node.js specialist, translation copywriter, frontend and backend developers, advertising screenwriter, marketing communicator, video monitoring operator, videomaker, Shopify and Golang developers, React mentor, exterior designer, internet marketer, software engineer, CRM system administrator, and many other new directions have emerged.

The question arises: is AI more beneficial or dangerous for society? Even setting aside the fact that neural networks' capabilities are hundreds of thousands of times greater than an ordinary human, they can create high-quality content, write scientific articles on poorly studied topics, and at the same time easily spread false information. The human can even imagine something that is a frightening reality – that if AI goes beyond control, it makes independent decisions. Destroying or building the world is within its power [7]. AI services have become so expensive that it is impossible to know who wrote an article being read. Today, no one can guarantee that a scientific article written or an ungraded drawing made by AI is actually a dissertation or an abstract. As more information accumulates in the information world, the real author becomes invisible, creating fertile ground for the spread of fake

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news. As a single example, during the Ukrainian War of the Fatherland, ideas spread on the internet that have a greater impact on the course of the war. In essence, the question of "who is right?" is being answered with "yes" by those who have broken the war's own rules before the fighting has even ended.

ChatGPT, a chat-bot operating with AI developed by OpenAI company, has covered the entire world, including Uzbekistan. Starting from November 30, 2022, it became possible to register using Uzbek mobile operator numbers and use the bot within the country's territory and across the world. Nevertheless, OpenAI company imposed restrictions on the use of ChatGPT chat-bot. This was related to internet providers, programmers, and internet users using the chat as a hacking tool, i.e., hackers breaking into personal data [8].

In 1990, IBM developed a machine translation system for French and English texts [9]. As a result, although not perfect, the system quickly created the ability to understand and translate large volumes of texts. IBM's project served as the foundation for all subsequent modern statistical and neural machine translation systems.

"Statistical machine translation" technology turned the translation task into a mathematical problem [10]. The development of statistical machine translation technology was a major revolution in the field of translation. It enabled translation to be faster, cheaper, and more convenient.

The third wave of interest in cybernetic devices, broader and more powerful than the previous waves, encompasses the technical tools necessary to solve AI problems, including wireless networks, the Internet, and the most advanced technologies.

The third wave began with the famous victory of the USA's "Deep Blue" program over six-time world chess champion, Russian grandmaster Garry Kasparov (born 1963). In the third wave, "genetic programming" also emerged. Genetic programming is one of the evolutionary computational methods in the field of AI, which uses the principles of natural selection in biological systems to solve problems. "Genetic programming" enabled finding optimal solutions to certain types of problems by imitating the mutation process in biological systems.

In the 21st century, computers transitioned qualitatively from the "computer era" to the "cognitive era". Artificial "neural network" technologies are characterized by the development of networks that threaten the biological neurons of living beings.

In 2006, a universal translation system, Google Translator based on Big Data, was launched. Its composition differs greatly from the first translation dictionaries; the system's composition consists of a trillion-word corpus of internet content [11]. The advantage of this system is explained by the ability to add new words that appear naturally in the language and to collect words that have become outdated and fallen out of use. After qualitative changes were made to the system, voice translation in more than sixty languages and fourteen languages was added.

Analysis of research on AI shows that research has gone beyond the boundaries of natural sciences [12]. Because perception, consciousness, and human personality are determined not by the activity of the brain alone, but by a person's relationship to the world around them. This reflects the need to bridge the gap between empirical and theoretical knowledge. The existence of AI is closely connected with social-humanitarian fields, including linguistics, text comprehension, mathematics based on grammar theory, and commutations developing algorithms.

As a result .of the conceptualization from "digital wealth" to "digital human", AI has entered many fields of human activity. This adds the responsibility of conducting interdisciplinary and transdisciplinary analysis of the evolution of technologies.

In conclusion, the dynamics of research in the field of AI are determined by internal and external factors. Internal factors include the creation of research programs aimed at solving common problems and their mutual influence. External factors include the growth of social needs and demands, the

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expansion of technical capabilities and the strengthening of their capacity for influence. Research is based on logistic (understanding thinking as a system of logical conclusions), integrative (bionic, cybernetic, neuropatho-physiological model of neural networks), heuristic (psychological model of the thinking process), cognitive (gnoseological model of thinking and cognition), and evolutionary (biological model of mutation and natural selection) programs. Simply put, the dynamics of research in the field of AI are connected with two factors. These are internal and external factors. Internal factors ensure that AI specialists create new research programs, connect them with each other, and strive to find optimal solutions to problems. External factors are closely related to the increase in society's need for AI, and the rapid development of technologies is creating a solid foundation for constructive research.

Research in the field of AI is very complex and multi-directional, with the goal of giving AI human-like capabilities. The truth is that no matter how much effort is made to make AI resemble a human, it is impossible due to AI's lack of memory of the past. AI lives only for today, the past holds no significance for it, and the future has not yet arrived. Even though AI has the ability to reprocess various data, AI can never understand the experience of a human being related to time and memory.

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