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PROBLEMS OF USING ARTIFICIAL INTELLIGENCE IN NET ART PRACTICES

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Abstract

The article reveals the impact of artificial intelligence (AI) on the development of net art – a form of media art, the main tool and environment of which is the Internet. AI is considered in the context of the evolution of net art. Modern artistic practices that use algorithmic technologies are analyzed, and the main ethical and social challenges associated with the introduction of AI into artistic processes are identified. Special attention is paid to the issue of authorship, as well as the transformation of the interaction between the artist, the viewer, and the artistic environment. The possibility of democratization and development of activist net-art practices is considered, thanks to the wide availability of AI. However, the risks of censorship, information manipulation, and commercialization of the creative process are identified due to the dependence of AI on large technological corporations. The study emphasizes the need for a critical reflection of these processes to understand future trends in the development of net art in the context of modern visual culture.

Aleksandr Afanasyev

Şəbəkə sənəti təcrübəsində süni intellektin tətbiqi problemləri

Xülasə

Məqalədə süni intellektin (Sİ) əsas aləti və mühiti İnternet olan media sənətinin şəbəkə sənətinin inkişafına təsiri açıqlanır. Süni intellekt şəbəkə sənətinin təkamülü kontekstində nəzərdən keçirilir. Alqoritmik texnologiyalardan istifadə edən müasir bədii təcrübələr təhlil edilir və Sİ-nin bədii proseslərə tətbiqi ilə bağlı əsas etik və sosial problemlər müəyyən edilir. Müəlliflik məsələsinə, eləcə də rəssam, tamaşaçı və bədii mühit arasında qarşılıqlı əlaqənin transformasiyasına xüsusi diqqət yetirilir. Sİ-nin geniş imkanları sayəsində şəbəkə sənətinin aktivist təcrübələrinin demokratikləşdirilməsi və inkişafı imkanları nəzərdən keçirilir. Bununla belə, süni intellektin böyük texnoloji korporasiyalardan asılılığı səbəbindən senzura, informasiyanın manipulyasiyası və yaradıcılıq prosesinin kommersiyalaşdırılması riskləri yaranır. Tədqiqat müasir vizual mədəniyyət kontekstində şəbəkə sənətinin inkişafında gələcək tendensiyaları anlamaq üçün bu proseslərin tənqidi şəkildə dərk edilməsinin zəruriliyini vurğulayır.

Александр Афанасьев

Проблемы использования искусственного интеллекта в практиках сетевого искусства

Аннотация

В статье раскрывается влияние искусственного интеллекта (ИИ) на развитие сетевого искусства – формы медиаискусства, основным инструментом и средой которого является Интернет. ИИ рассматривается в контексте эволюции сетевого искусства. Анализируются современные художественные практики, использующие алгоритмические технологии, и выявляются основные этические и социальные вызовы, связанные с внедрением ИИ в художественные процессы. Особое внимание уделяется вопросу авторства, а также трансформации взаимодействия художника, зрителя и художественной среды. Рассматривается возможность демократизации и развития активистских практик сетевого искусства благодаря широкой доступности ИИ. Однако выявляются риски цензуры, манипулирования информацией и коммерциализации творческого процесса из-за зависимости ИИ от крупных технологических корпораций. В исследовании подчеркивается необходимость критического осмысления этих процессов для понимания будущих тенденций развития сетевого искусства в контексте современной визуальной культуры.

Keywords: Net Art, Artificial Intelligence, AI, Media Art, Algorithms, Memes, Deepfake.

Açar sözlər: Net Art, Süni İntellekt, Sİ, Media Art, Algoritmlər, Memlər, Deepfake.

Ключевые слова: Сетевое искусство, искусственный интеллект, ИИ, медиа-искусство, алгоритмы, мемы, дипфейк.

Net art is a type of contemporary media art that operates in the Internet environment. Artists involved in creating net art increasingly use artificial intelligence (AI) in their work, allowing them to embody new artistic forms and methods.

AI art not only fits into the framework of net art, but is a certain continuation of its evolution. It began with the formation of net art in the 1990s and continued in the 2010s with the so-called post-net art. British researcher Joanna Zyliniska proposed this concept in her book *AI Art: Machine Visions and Warped Dreams*. The author notes that the representatives of the initial net art “had a sharp understanding of the potential of the new medium and of its yet undefined boundaries and modes of operation” [Zyliniska, J., 2020, pp. 129-130]. The art of this initial stage is marked by a special attention to and greater dependence on new technologies. At the same time, post-net art focuses not only on the network itself but also on its impact on culture, society, and personality. Representatives of this direction, who essentially grew up in times of rapid spread and greater accessibility of the Internet, the emergence of social networks and messengers, saw in the Internet space something natural, familiar, and integrated into their personal lives. Therefore, Joanna Zyliniska writes that the “sense of novelty and curiosity about the digital environment were less pronounced than in the previous generation of online artists” [Zyliniska, J., 2020, p. 130]. The viewer in post-net art is more of a co-author than a passive observer. This approach coincides with the phenomenon of *relational aesthetics*, which was described in the 1990s by French art historian, curator, and art critic Nicolas Bourriaud [Bourriaud, N., 1998].

AI art has more in common with early net art due to its familiarity and experimentation with new technological phenomena. However, the political and economic context has undergone radical changes. The spirit of freedom, cooperation, and protest that was felt at the beginning of the Internet

has changed to an understanding of the apparent dependence of the Internet on large technology and media companies, political structures that compete with each other for the opportunity to influence people's consciousness, masking this with visual diversity, spectacularity and illusory personification, which is maximally embodied in AI art [Zylinska, J., 2020, p. 132]. At the same time, communication between the author and the audience is becoming more difficult, because a machine can now be considered the author or co-author of AI art.

The issue of authorship is one of the main problems in using AI in net art. With the help of AI algorithms that can process huge amounts of data and the necessary prompts (queries and keywords), various artistic works can be created. But it has not yet been definitively established who owns the copyright to them: the developers of the algorithm, the artist who set the input parameters, or the machine itself as a full-fledged creator.

The introduction of AI into artistic practices, in general, contributes to the popularization of net art and media art and, at the same time, puts traditional authorial artistic practices at risk, reducing the need for physical creativity and opening up opportunities for automated content creation. The usual forms of communication in the art market are also changing, and the value of artworks in the digital sphere is being redefined.

The first-ever art auction by Christie's, which was entirely dedicated to AI-generated works, caused a great resonance. The auction, titled Augmented Intelligence, closed on February 5, 2025, and attracted great attention from artists and collectors. The total sales, which amounted to \$728,784, exceeded the expected \$600,000. The most expensive lot was the work by Refik Anadol under the title *Machine Hallucinations – ISS Dreams – A*, which was sold for \$277,200 [Kyreito, M., 2025].

The art community reacted to the auction with mixed reactions. Thousands of artists claimed that artificial intelligence algorithms use human creativity without the authors' consent. Almost 4,000 people signed an open letter asking Christie's to cancel the auction, accusing AI and its developers of using data obtained from copyrighted materials [Kyreito, M., 2025].

On the other hand, a vague idea of the authorship of AI works can contribute to the active development of political net art and, with it - the unification of people around current problems. A vivid example of this trend is the unique folk art in the form of memes - elements of information or phenomena on the Internet that quickly spread from person to person and achieve great popularity and recognition in a short time. Another important feature of Internet memes, as noted by the researcher of this phenomenon Limor Shifman, is intertextuality: “memes often relate to each other in complex, creative, and surprising ways” [Shifman, L., 2013, p. 2]. Anonymous AI-generated memes can be a powerful tool for critique and activism, allowing different narratives to be expressed more boldly and safely. They can attract a wide audience, and their concise but capacious visual format can convey complex socio-political ideas in an accessible way. Memes, through their satire and humor, can be useful in the information struggle with enemy countries, authoritarian regimes, in outlining domestic political problems, and in supporting the morale of the population in difficult times.

The potential democratization of art is a positive aspect of introducing AI into net art. The extensive and convenient toolkit of artificial intelligence allows even those people who do not have deep artistic and technical knowledge to create their works of art. Thanks to deep learning algorithms

and the processing of a large amount of information, artists can experiment with great visual diversity, creating works that would have been difficult to implement before. Artificial intelligence makes art more accessible to a broad audience and enriches the global artistic context with new forms, contents, and narratives. However, the total dependence of this art on corporations and rich countries, which have powerful technical and information resources for the implementation and development of AI, and often paid access to resources for the generation of artistic works, raises certain doubts about full democracy, equality of all authors, and the absence of creative frameworks.

The problem of censorship also remains relevant. On the one hand, large technology companies can interfere with the algorithms for generating AI works, excluding certain visual elements, thereby neutralizing certain socio-political messages. On the other hand, the rapid development of algorithms and their difficult controllability can lead to the harmful use of AI by individuals or even political regimes and countries, including through the creation of fakes for the purpose of changing facts, manipulating consciousness, ridicule, and information warfare.

Deepfake is a technology using deep learning AI algorithms to create or modify audiovisual content that can imitate real images, videos, or voice recordings.

On March 16, 2022, Russian hackers hacked the Ukrainian telethon “United News” while the Ukraine24 team was working. A scrolling line began to run, showing Zelensky's statement about surrender and a call for the military to lay down their arms. This statement turned out to be fake, as did a similar video with Zelensky, which was distributed on propaganda sites and after that on social networks and messengers [Simonova, A., 2022]. It was made in very low quality, but a certain part of the audience could have believed it. After this deepfake was discovered, the false video was deleted on Facebook and Instagram, as the head of security policy at Meta Nathaniel Gleicher wrote [Simonova, A., 2022].

Works created with the help of artificial intelligence can be not only a tool for creative self-expression or exploration of the boundaries of net art, but also a way to critically reflect on the technology itself. Using various machine learning algorithms, artists demonstrate their limitations and shortcomings, hidden biases, and possible social consequences of the active implementation of AI.

The project *ImageNet Roulette* by artist Trevor Paglen and artificial intelligence researcher Kate Crawford was a site where people could upload their photos, and AI analyzed the images and selected descriptions in the form of keywords. The project involved the big ImageNet photo database, which is used to train artificial image recognition systems [Rea, N., 2019].

Website *ImageNet Roulette* became popular, and people started sharing the results on social media. However, while some of the descriptions were normal or funny, others were offensive and had racial, gender, or religious stereotypes. It turned out that the labels on the photos selected for training the algorithm were manually placed by people [Rea, N., 2019]. Some of the labels had biases that people consciously or unconsciously shared with artificial intelligence. The aim of *ImageNet Roulette* is “exposing how systemic biases have been passed onto machines through the humans who trained their algorithms” [Rea, N., 2019].

MegaPixels – a project by American artist Adam Harvey, also addresses the topic of image selection for machine learning and the ethical issues involved. The project began in 2017 with an

installation created in collaboration with Tactical Tech for the Glass Room exhibition in London. With an installation that used a facial recognition algorithm, it was possible to find out if you could be in a large publicly available facial recognition training dataset called MegaFace (V2). For this training set, 4.2 million photos were taken from the image hosting Flickr without any consent of the authors [Harvey, A., 2017]. Therefore, there is a risk that any person could be involved in developing artificial intelligence without even knowing it. Adam Harvey notes that “these 4.2 million images are now being transferred between researchers in the US, China, Russia, and worldwide to train and evaluate state-of-the-art facial recognition algorithms” [Harvey, A., 2017].

The active introduction of artificial intelligence elements into net art contributes to the expansion of artistic tools. On the one hand, algorithmic technologies open up new forms of creativity, make art accessible to a wider audience, and allow for experimentation with visual and conceptual approaches. On the other hand, the problem of authorship arises as the line between the role of the artist and the algorithm remains blurred.

The socio-political context of AI development in art is also changing: the initial spirit of openness and collaboration is giving way to increasing control by technology corporations and political structures. This fact raises questions of censorship, creative process commercialization, and public opinion manipulation. At the same time, algorithmic art can serve as a tool for critical analysis of technological development, highlighting the biases and limitations of current AI systems, which may lead to developers revising the rules of AI work.

The role of artificial intelligence in networked art is ambiguous. It expands the boundaries of creativity, but also provokes active discussions about its impact on such concepts as authorship, ethical norms and artistic autonomy. The development of this direction requires a deeper analysis of cultural, aesthetic and ethical aspects in order to find a balance between rapid technical progress and the preservation of traditional artistic values.

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