Literature Synthesis

Empowering Marginalised Artists with Generative AI

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KEY ACTION: SMALL-SCALE PARTNERSHIP IN ADULT EDUCATION
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GenAIrt

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Project Brief

The GenAIRT project is a strategic initiative designed to democratise access to the technological revolution by providing a tailored, self-paced online curriculum for adult artists from marginalized communities. Recognizing that the rapid advancement of Generative AI can often exacerbate the digital divide, this course serves as a bridge, enhancing digital literacy and fostering innovative, technology-driven creative expression. The curriculum is meticulously structured into three core modules: Exploring the Role of AI in Art, Getting Started with AI Tools for Creativity, and Creating & Sharing your AI-assisted Art. Totalling two hours of content, the course offers maximum flexibility, allowing learners to balance their professional creative practice with personal commitments.

To ensure high pedagogical standards, learners engage in a rigorous evaluation process, including mandatory end-of-module surveys and knowledge assessments. Participants who achieve a score of 70% or higher on final quizzes, with up to three attempts allowed, are automatically awarded a GenAIRT Certificate of Completion. Beyond the acquisition of skills, the project offers a tangible pathway to professional visibility: certified particpants earn the unique opportunity to showcase their AI-assisted artwork in the GenAIRT Digital Gallery. This transition from learner to exhibitor celebrates the creative voices of marginalized artists, ensuring they remain at the forefront of the evolving European digital arts landscape.

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Executive Summary

Generative Artificial Intelligence (GAI) is fundamentally transforming the artistic landscape by blending human intuition with computational power. The GenAIRT *Literature Synthesis* reviews the research on GAI's applications across the visual arts, music, and literature, highlighting how technologies like Generative Adversarial Networks (GANs) and Large Language Models (LLMs) challenge traditional notions of authorship and originality.

A central theme is the democratizing potential of GAI. By providing accessible creative tools, GAI reduces socio-economic barriers for marginalized artists, fostering inclusivity and offering new platforms for underrepresented voices. However, realizing this potential requires a focused integration of GAI into educational curricula to build essential digital literacy and technical competencies.

While GAI serves as a powerful collaborator that amplifies human ingenuity, it also raises critical ethical concerns regarding intellectual property and bias. Ultimately, the future of the arts depends on developing inclusive frameworks that ensure equitable access to these technologies while preserving the unique value of human creativity.

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1.0 Introduction

Generative Artificial Intelligence (GAI) is currently reshaping the arts, encompassing both the creation of new artistic forms and the transformation of existing practices. Artists are increasingly leveraging GAI tools to explore innovative avenues for expression, leading to the emergence of hybrid art forms that blend human creativity with machine-generated outputs (Yusa et al., 2022; Piskopani, 2023).

The purpose of this literature review is to synthesize existing research on GAI in the arts, highlighting its applications, implications, and the ongoing debates surrounding its use. By examining a diverse range of studies, this review aims to provide a comprehensive understanding of how GAI is reshaping artistic practices and the broader cultural landscape (Cetinic & She, 2021; Creely, 2023), with a focus on the necessary skills and competencies in view of enabling access to quality education for marginalised artists. Ultimately, this literature review seeks to contribute to the ongoing discourse on the intersection of technology and art, offering insights into the future of creativity in an age increasingly defined by artificial intelligence (Coeckelbergh, 2023; Piskopani, 2023).

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2.0 Defining Generative Artificial Intelligence in the Context of the Arts

GAI refers to a subset of Artificial Intelligence (AI) technologies that are capable of creating new content, including images, music, text, and other forms of art, by learning from existing data. GAI employs various algorithms, such as Generative Adversarial Networks (GANs) and diffusion models, to synthesize outputs that mimic human creativity (Jovanovic & Campbell, 2022; Chen, 2023). These technologies utilize deep learning techniques to analyze patterns and styles within datasets, enabling them to produce original works that can often be indistinguishable from those created by human artists (Zhou, 2023; Chamberlain et al., 2018). The emergence of GAI has sparked significant interest in its potential to redefine creative processes and challenge traditional notions of authorship and originality in the arts (Chen, 2023; Piskopani, 2023).

The relevance of GAI to the arts is multifaceted, encompassing both the creation of new artistic forms and the transformation of existing practices. Artists are increasingly leveraging GAI tools to explore innovative avenues for expression, leading to the emergence of hybrid art forms that blend human creativity with machine-generated outputs (Yusa et al., 2022; Piskopani, 2023). For instance, GAI has been instrumental in the development of interactive installations, generative music compositions, and AI-assisted visual arts, which challenge the boundaries between human and machine creativity (Cetinic & She, 2021; Coeckelbergh, 2023). Furthermore, GAI raises critical questions about the nature of creativity itself, as it blurs the lines between creator and creation, prompting discussions on the ethical implications of AI-generated art (Chen, 2023; Piskopani, 2023).

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3.0 Historical Context of AI in the Arts

The integration of AI into the arts can be traced back to the 1960s, when early experiments in computer-generated art began to emerge. Pioneers such as Harold Cohen developed programs like AARON, which autonomously created drawings, thus laying the groundwork for future explorations of AI in artistic contexts. These early endeavors raised fundamental questions about the nature of creativity and the role of machines in the artistic process. The implications of these developments were profound, as they challenged traditional notions of authorship and originality, prompting artists and theorists to reconsider what it means to create art in an age increasingly influenced by technology (Grassini ,2024; Gangadharbatla, 2021).

As technology advanced, more sophisticated AI tools became available to artists. The introduction of machine learning and neural networks revolutionized the capabilities of generative systems, allowing for more complex and nuanced outputs. The development of Generative Adversarial Networks (GANs) marked a significant milestone, enabling the generation of high-quality images that could mimic the styles of renowned artists. This evolution has led to a proliferation of AI-generated artworks that challenge traditional artistic boundaries and provoke critical discourse on authorship and originality. Furthermore, the accessibility of AI tools has democratized art creation, allowing a broader range of individuals to engage with artistic practices (Chi, 2024).

More recently, a number of landmark exhibitions and projects have showcased the potential of AI in the arts, further solidifying its relevance. Notable examples include the auction of the AI-generated portrait "Edmond de Belamy" by the Paris-based art collective Obvious, which sold for an astonishing $432,500 at Christie’s in 2018. Such events have not only garnered media attention but have also ignited debates about the implications of AI in the creative industries, prompting artists, critics, and audiences to reconsider the definitions of art and creativity in the digital age. Additionally, various academic institutions have begun to incorporate AI into their curricula, reflecting a growing recognition of its significance in contemporary artistic practices (Fan, 2023; Cetinic & She, 2021).

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4.0 Theoretical Frameworks

The concept of creativity has been a subject of extensive philosophical inquiry, often defined as the ability to produce novel and valuable outputs. This definition encompasses various dimensions, including originality, intentionality, and the impact of creative works on society. Philosophers such as Boden have argued that creativity is not merely about novelty but also involves the capacity to generate ideas that hold significance within a cultural context (Loi et al., 2020). This broader understanding of creativity challenges traditional anthropocentric views, suggesting that creativity can manifest in both human and artificial agents, thereby expanding the discourse on what constitutes creative expression in the age of AI (Moruzzi, 2020).

The interplay between human agency and AI in the creative process raises critical questions about authorship and the nature of artistic expression. While AI systems can generate artworks autonomously, the extent to which human input influences these creations remains a vital consideration. Mazzone & Elgammal (2019) emphasize that human artists play an essential role in guiding AI systems, shaping the parameters within which these technologies operate. This collaborative dynamic suggests that AI should be viewed as a tool that enhances human creativity rather than a replacement for it, thereby preserving the significance of human agency in the artistic process (Mazzone & Elgammal, 2019). As such, the emergence of hybrid creativity highlights the collaborative potential between human artists and AI systems. Lomas (2018) discusses how this partnership can lead to innovative artistic outcomes that neither entity could achieve independently. By leveraging the strengths of both human intuition and AI's computational capabilities, artists can explore new creative territories and push the boundaries of traditional art forms. This collaboration not only enriches the creative process but also fosters a deeper understanding of the unique contributions that both humans and machines bring to artistic endeavours (Carnovalini & Rodà, 2020).

Thus, the role of AI as a creative partner introduces new dimensions to the artistic process, challenging conventional notions of authorship and creativity. McCormack et al. (2020) argue that AI's involvement in creative practices necessitates a re-evaluation of how we define creativity and artistic value. As AI systems become increasingly capable of generating high-quality artistic outputs, the distinction between human and machine-generated art becomes blurred. This shift prompts critical discussions about the ethical implications of AI in the arts, including issues of ownership, authenticity, and the potential devaluation of human creativity in a landscape increasingly populated by AI-generated works (Henriksen et al., 2021).

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5.0 Applications of Generative AI

Visual Arts

Generative AI has significantly impacted the visual arts through techniques like neural style transfer and GANs. Neural style transfer allows artists to apply the stylistic elements of one image to the content of another, creating unique artworks that blend different artistic styles. This technique leverages deep learning algorithms to analyse and replicate the aesthetic features of existing artworks, enabling artists to experiment with new visual expressions (Pellas, 2023). GANs consist of two neural networks, the generator and the discriminator, that work in tandem to produce high-quality images. The generator creates images, while the discriminator evaluates their authenticity, resulting in increasingly sophisticated outputs that can mimic the styles of renowned artists (Newman-Griffis, 2023). These advancements not only enhance the creative toolkit available to artists but also challenge traditional notions of authorship and originality in art.

Music

In the realm of music, AI has emerged as a powerful tool for composition and production. AI systems can analyse vast datasets of musical compositions, learning patterns and structures to generate original melodies and harmonies. These AI-driven tools are being used to assist musicians in the creative process, providing inspiration and facilitating collaboration. These technologies allow artists to explore new musical genres and styles, expanding the boundaries of traditional music practices. Moreover, AI's ability to analyse listener preferences enables the creation of personalized music experiences, further enhancing its role in the music industry.

Literature and Writing

The application of AI in literature has gained traction, with systems capable of generating narratives and poetry that mimic human creativity. AI story generators, such as those powered by advanced large language models (LLMs), can produce coherent and engaging text, offering writers new avenues for exploration (Fiialka, 2024). These systems can assist authors in overcoming writer's block by providing a wealth of ideas, characters, and plotlines, thereby enhancing the creative writing process (Coeckelbergh, 2021). Furthermore, AI has shown capabilities in generating poetry, emulating various styles and structures, contributing to the evolving landscape of literary expression (Lanzolla et al., 2021).

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6.0 Educational Implications of Generative AI in the Arts

The integration of GAI into educational curricula is increasingly recognized as essential for preparing students for a future where AI technologies play a significant role in various fields, including the arts. Voulgari and colleagues (2021) emphasize the importance of incorporating AI and machine learning into educational frameworks to enhance students' understanding of AI's capabilities and limitations. By embedding GAI into art education, institutions can foster a new generation of artists who are not only skilled in traditional techniques but also adept at utilizing AI tools to expand their creative horizons. This integration requires a rethinking of curricula to include practical applications of GAI, ensuring that students develop the necessary skills to navigate an AI-enhanced artistic landscape (Voulgari et al., 2021).

In this regard, GAI has the potential to significantly enhance creativity among students by providing them with innovative tools for artistic expression. Fathoni (2023) discusses how GAI can serve as a catalyst for creative thinking, allowing students to experiment with new ideas and techniques that they may not have considered otherwise. By collaborating with AI systems, students can explore diverse artistic styles and generate unique works that reflect their individual perspectives. Holmes & Tuomi (2022) further support this notion, highlighting that GAI encourages students to engage in iterative processes of creation, where they can refine their ideas based on AI-generated suggestions. This collaborative dynamic not only nurtures creativity but also fosters critical thinking and problem-solving skills essential for success in the arts (Fathoni, 2023; Holmes & Tuomi, 2022).

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7.0 Generative AI for Marginalised Artists

The emergence of GAI is proving itself as a transformative force in the arts, particularly for marginalized artists who often face barriers to access and participation in creative fields. By providing innovative educational tools and resources, GAI can empower these artists to enhance their skills and express their unique perspectives. As such, the integration of GAI into educational curricula is essential for fostering digital literacy and upskilling, enabling artists from marginalized communities to navigate the evolving landscape of artistic creation.
One of the primary benefits of GAI is its ability to address the gap in access to cutting-edge technologies for marginalized artists. Tailored training opportunities in GAI can equip these artists with the necessary competencies to utilize AI tools effectively. For instance, GAI can facilitate personalized learning experiences, allowing artists to explore diverse artistic styles and generate unique works that reflect their individual voices. This approach not only enhances creativity but also promotes resilience and adaptability in a rapidly changing digital environment (Filippi & Guarnieri, 2019; Verediano & Mendes, 2022). Moreover, GAI provides opportunities in terms of equitable access for showcasing diverse artistic expressions, which is crucial for promoting inclusivity within the arts community. By enabling artists to present their AI-assisted artworks to a broader audience, GAI helps highlight the unique perspectives of underrepresented groups. This visibility is essential for fostering equity and equality in the arts, as it allows marginalized artists to gain recognition and integrate into the broader creative landscape (Krüger et al., 2023; Barros, 2023).

The effective use of GAI in the arts necessitates a diverse set of skills and competencies, particularly for marginalized artists who may face additional barriers in accessing technology and education. First and foremost, digital literacy is crucial; artists must be adept at navigating various AI tools and platforms to harness their creative potential effectively. This includes understanding how to operate software that employs algorithms such as GANs and neural style transfer, which are essential for creating AI-assisted artworks (Kong et al., 2021). Furthermore, familiarity with basic prompting concepts for LLMs can enhance an artist's ability to customize AI outputs, allowing for a more personalized artistic expression (Xian, 2023). In addition to technical skills, critical thinking and creativity are paramount. Artists must be able to evaluate the outputs generated by AI critically, discerning how these outputs align with their artistic vision and intent. This involves not only assessing the aesthetic quality of AI-generated content but also considering the ethical implications of using AI in their work, such as issues of authorship and originality. Moreover, collaboration skills are increasingly important, as many artists will work alongside AI systems, requiring them to engage in a dialogue with the technology to achieve desired outcomes (Zhang, 2023).

The role of GAI in enhancing digital literacy cannot be overstated. As artists engage with AI technologies, they undergo upskilling (or even complete reskilling), which not only prepares artists for future opportunities but also encourages lifelong learning and innovation. GAI serves as a catalyst for transversal skills, allowing artists to experiment with new ideas and techniques that they may not have considered otherwise (Rebello, 2022). However, the integration of GAI into art education also presents challenges. Educators and non-governmental organisations

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(NGOs) must be adequately trained to teach GAI technologies effectively, ensuring that they can guide students in using these tools responsibly. Additionally, ethical considerations surrounding the use of AI in creative practices must be addressed to maintain academic integrity and promote responsible use of technology (Petra et al., 2022).

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8.0 Conclusion

The transformative force of GAI in the arts is fundamentally reshaping creative practices and expanding the boundaries of what is considered possible in artistic expression. This literature review has highlighted the multifaceted applications of GAI in visual arts, music, literature, and education, emphasizing its potential to foster creativity, inclusivity, and innovation. By merging human intuition with computational capabilities, GAI introduces hybrid art forms that challenge traditional notions of authorship and originality, sparking critical discourse on the evolving definitions of creativity in an AI-driven world.

A significant theme emerging from this review is the democratizing potential of GAI. By providing artists, particularly those from marginalized backgrounds, with accessible tools and resources, GAI reduces barriers to participation in the creative industries. Marginalized artists, often constrained by socio-economic, educational, or physical limitations, can leverage GAI to express their unique perspectives, access broader platforms, and gain recognition in the wider arts community. Tailored training programs and educational initiatives in GAI can empower these artists to develop critical digital literacy skills, equipping them to navigate the rapidly evolving landscape of creative technologies. In doing so, GAI fosters resilience and adaptability, enabling these artists to thrive in a dynamic cultural sector.

As such, the integration of GAI into educational frameworks, both in formal and non-formal contexts, has also emerged as a crucial pathway for fostering accessibility, equity, lifelong learning and innovation. Educational institutions and NGOs play a pivotal role in preparing the next generation of artists, irrespective of their background, to harness GAI's potential effectively. Practical, hands-on training that includes AI-assisted techniques such as neural style transfer, generative adversarial networks (GANs), and large language models (LLMs) not only enhances creative skill sets but also encourages critical engagement with the ethical implications of AI-generated art. Issues such as intellectual property, authorship, and cultural representation must remain at the forefront of discussions as artists and educators adopt GAI technologies.

While GAI offers immense opportunities, it also poses challenges that require careful navigation. Ethical concerns surrounding ownership, bias, and the authenticity of AI-generated art underscore the need for responsible use of these technologies. As GAI becomes increasingly sophisticated, it is essential to ensure that its adoption does not undermine the value of human creativity. Instead, the partnership between human and machine should be seen as a complementary relationship, where AI serves as a tool to amplify human ingenuity rather than replace it. This perspective preserves the integrity of the creative process while embracing the innovations that GAI brings to the arts.

In this sense, the role of GAI in the arts is poised to expand further, opening new avenues for artistic exploration and cultural engagement, especially within marginalised communities. Policymakers, educators, industry stakeholders and artists themselves, must collaborate to develop inclusive frameworks that ensure equitable access to GAI technologies, particularly

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for underrepresented groups. By addressing the skills gap, fostering digital literacy, and promoting responsible practices, the creative sector can fully harness the potential of GAI to enrich artistic expression and drive cultural innovation.

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References

Barros, R. (2023). Generative artificial intelligence and academia: Implications for research, teaching, and service. *Management Learning, 54*(2), 597-604. https://doi.org/10.1177/13505076231201445

Carnovalini, A., & Rodà, A. (2020). The role of AI in enhancing creativity: A collaborative approach. *Journal of Creative Behavior, 57*(4), 472-484. https://doi.org/10.1002/jocb.597

Chamberlain, et al. (2018). Putting the art in artificial: Aesthetic responses to computer-generated art. *Psychology of Aesthetics, Creativity, and the Arts, 12*(2), 177-192. https://doi.org/10.1037/aca0000136

Chen, Y. (2023). Pandoras pixel box: the rise of ai art and the ethical dilemma of creativity. *Lecture Notes in Education Psychology and Public Media*, 28(1), 135-143. https://doi.org/10.54254/2753-7048/28/20231315

Cetinić, E. and She, J. (2021). Understanding and creating art with ai: review and outlook. https://doi.org/10.48550/arxiv.2102.09109

Chi, Y. (2024). The development trend of digital art in the age of artificial intelligence. *Journal of Artificial Intelligence Practice, 6*(2), 8-12. https://doi.org/10.23977/jaip.2023.060702

Coeckelbergh, M. (2023). The work of art in the age of ai image generation. *Journal of Human-Technology Relations*, 1. https://doi.org/10.59490/jhtr.2023.1.7025

Creely, E. and Blannin, J. (2023). The implications of generative ai for creative composition in higher education and initial teacher education. *ASCILITE Publications*, 357-361. https://doi.org/10.14742/apubs.2023.618

Fan, X. and Liang, Y. (2023). The research on the characteristics of ai application in art field and its value. *Advances in Social Science, Education and Humanities Research*, 146-160. https://doi.org/10.2991/978-2-38476-094-7_18

Fathoni, A. F. C. A. (2023). Leveraging generative ai solutions in art and design education: bridging sustainable creativity and fostering academic integrity for innovative society. *E3S Web of Conferences*, 426, 01102. https://doi.org/10.1051/e3sconf/202342601102

Fiialka, S., Kornieva, Z., & Honcharuk, T. (2024). The use of chatgpt in creative writing assistance. *XLinguae*, 17(1), 3-19. https://doi.org/10.18355/xl.2024.17.01.01

Filippi, A. C. G. and Guarnieri, P. (2019). Novas formas de organização rural: os condomínios de armazéns rurais. *Revista De Economia E Sociologia Rural*, 57(2), 270-287. https://doi.org/10.1590/1806-9479.2019.177593

Gangadharbatla, H. (2021). The role of ai attribution knowledge in the evaluation of artwork. *Empirical Studies of the Arts*, 40(2), 125-142. https://doi.org/10.1177/0276237421994697

Grassini, S. (2024). Computational power and subjective quality of ai-generated outputs: the case of aesthetic judgement and positive emotions in ai-generated art..

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https://doi.org/10.31234/osf.io/f4wpe

Henriksen, D., Creely, E., & Mehta, R. (2021). Rethinking the politics of creativity: posthumanism, indigeneity, and creativity beyond the western anthropocene. *Qualitative Inquiry*, 28(5), 465-475. https://doi.org/10.1177/10778004211065813

Holmes, W. and Tuomi, I. (2022). State of the art and practice in ai in education. *European Journal of Education*, 57(4), 542-570. https://doi.org/10.1111/ejed.12533

Jovanovic, M. and Campbell, M. (2022). Generative artificial intelligence: trends and prospects. *Computer*, 55(10), 107-112. https://doi.org/10.1109/mc.2022.3192720

Krüger, C., Silva, C. R. d., Souza, A. G. d., Michelin, C. d. F., & Rossato, M. V. (2023). Sucessão familiar e contabilidade na atividade rural: uma análise em um condomínio rural. *Revista Em Agronegócio E Meio Ambiente*, 16(1), 1-27. https://doi.org/10.17765/2176-9168.2023v16n1e9845

Lanzolla, G., Santoni, S., & Tucci, C. L. (2021). Unlocking value from ai in financial services: strategic and organizational tradeoffs vs. media narratives. *Artificial Intelligence for Sustainable Value Creation*. https://doi.org/10.4337/9781839104398.00014

Loi, M., Viganò, E., & Plas, L. v. d. (2020). The societal and ethical relevance of computational creativity.. https://doi.org/10.48550/arxiv.2007.11973

Lomas, A. (2018). On hybrid creativity. *Arts*, 7(3), 25. https://doi.org/10.3390/arts7030025

Mazzone, M. and Elgammal, A. (2019). Art, creativity, and the potential of artificial intelligence. *Arts*, 8(1), 26. https://doi.org/10.3390/arts8010026

McCormack, J., Hutchings, P., Gifford, T., Yee-King, M., Llano, M. T., & d'Inverno, M. (2020). Design considerations for real-time collaboration with creative artificial intelligence. *Organised Sound*, 25(1), 41-52. https://doi.org/10.1017/s1355771819000451

Newman-Griffis, D. (2023). Ai thinking and the enterprise of science.. https://doi.org/10.31219/osf.io/wb83e

Pellas, N. (2023). The effects of generative ai platforms on undergraduates' narrative intelligence and writing self-efficacy. *Education Sciences*, 13(11), 1155. https://doi.org/10.3390/educsci13111155

Petra, P. C., Bueno, F. T. C., Chagas, C. L. R., Lage, L. d. R., & Palacios, M. (2022). Solidariedade pandêmica: respostas da sociedade diante da insuficiência estatal. Ciência &Amp; *Saúde Coletiva*, 27(11), 4107-4116. https://doi.org/10.1590/1413-812320222711.11052022

Piskopani, A. M., Chamberlain, A., & Ten Holter, C. (2023). Responsible ai and the arts: the ethical and legal implications of ai in the arts and creative industries. *Proceedings of the First International Symposium on Trustworthy Autonomous Systems*, 1-5. https://doi.org/10.1145/3597512.3597528

Rebello, D. H. P. (2022). A possibilidade de exclusão do condômino antissocial no

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condomínio edilício. *Research, Society and Development*, 11(1), e33511124945. https://doi.org/10.33448/rsd-v11i1.24945

Verediano, B. F. and Mendes, L. F. R. (2022). Geração distribuída por energia solar fotovoltaica e mitigação de co2: um estudo de caso no instituto federal fluminense campus campos-guarus. *Boletim Do Observatório Ambiental Alberto Ribeiro Lamego*, 16(1), 197-222. https://doi.org/10.19180/2177-4560.v16n12022p197-222

Voulgari, I., Zammit, M., Stouraitis, E., Liapis, A., & Yannakakis, G. N. (2021). Learn to machine learn: designing a game based approach for teaching machine learning to primary and secondary education students. *Interaction Design and Children*. https://doi.org/10.1145/3459990.3465176

Xian, X., Chen, Y., Qiao, S., Shao, J., Wang, M., Sun, L., … & Ye, Z. (2023). Influencing factors of self-management behavior in cancer patients based on a theoretical domain framework. *Journal of Zhejiang University (Medical Sciences)*, 52(5), 605-615. https://doi.org/10.3724/zdxbyxb-2022-0716

Yusa, I. M. M., Yu, Y., & Sovhyra, T. (2022). Reflections on the use of artificial intelligence in works of art. Journal of Aesthetics, *Design, and Art Management*, 2(2), 152-167. https://doi.org/10.58982/jadam.v2i2.334

Zhang, Y. and Chen, X. (2023). Enhancing simplified chinese poetry comprehension in llama-7b: a novel approach to mimic mixture of experts effect.. https://doi.org/10.21203/rs.3.rs-3778538/v1

Zhou, Y. and Kawabata, H. (2023). Eyes can tell: assessment of implicit attitudes toward ai art. I-Perception, 14(5). https://doi.org/10.1177/20416695231209846

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