

# The Role of Artificial Intelligence in Enhancing Creativity in Painting By

**Dickson, Wisdom**

Ignatius Ajuru University of Education  
Rumuolumini, Port Harcourt  
Faculty of Humanities  
Department of Fine and Applied Arts  
[Wisdomdickson17@gmail.com](mailto:Wisdomdickson17@gmail.com)

## Abstract

This study, "The role of Artificial Intelligence in Enhancing Creativity in Painting", integrates creativity by leveraging artificial intelligence tools as an artist in painting. This study leverages AI tools to create a new frontier in the world of painting, offering an innovative way to build a lasting relationship between humans and AI, with the view that AI has come to stay and will support humanity. However, with the involvement of artificial intelligence, it has also served as a blurring frontier between the A.I. tools and the creative mind of an artist, which whispers the question in the mind of people, "Does artificial intelligence really influence the creative decision-making process of an artist positively?. This research aims to give an enlightenment on the various AI tools and how they enhance creativity in painting, with the objective to identify the limitations and benefits of Artificial Intelligence in painting. Findings reveal that A.I. tools enable artists to experiment and explore with new techniques, styles and medium with increased productivity in expanding their creative knowledge. The researcher concludes that A.I. tools are very beneficial to a painter as they enhance his creativity and help in individual improvement. I recommend that artists explore the use of Artificial Intelligence in enhancing their creativity in painting. Remarkably, this study contributes to knowledge by enlightening and encouraging the use of artificial intelligence in painting.

**Keywords:** Artificial Intelligence, Leverage, Innovative, Blurring, Whisper, Frontiers

## Introduction

The role of Artificial Intelligence in enhancing creativity in painting is encouraging, as it contributes to a painter's imagination. I am a painter. Even with the emergence of A.I., it should be noted that the traditional style of a painter should not be sidelined because it makes the artist who he is, "a creator," which throws us back to the study of "what is painting". According to Angelo A., David, K., Yoel, B., Dorit, L. & Eduardo, K. from EDEN Gallery (2021) defined painting as the act or process of using paint. The paint creates an artwork known as a painting, or it can be used more practically as a protective coating or decorative finish. Painting is the expression of ideas and emotions through the creation of aesthetic qualities in a two-dimensional visual language.

The elements of this language, its shapes, lines, colours, tones, and textures, are used in various ways to produce sensations of volume, space, movement, and light on a flat surface (Peter, D.O. 2025). According to Matt C. (2023), Artificial Intelligence is an interdisciplinary science with many approaches; it can be rule-based and operate under a predefined set of conditions, or it can use machine learning algorithms to adapt to its environment. The latter is compelling, as it enables AI systems to learn from data, thereby increasing their versatility and capacity to handle unforeseen scenarios. Artificial intelligence (AI), the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalise, or learn from past experience. Since their development in the 1940s, digital computers have been programmed to carry out very complex tasks, such as proving mathematical theorems or playing chess with excellent proficiency. Despite ongoing advances in computer processing speed and memory capacity, there are as yet no programs that can match the complete flexibility of humans across broader domains or in tasks that require substantial everyday knowledge. On the other hand, some programs have attained the performance levels of human experts and professionals in executing certain specific tasks, so that artificial intelligence in this limited sense is found in applications as diverse as medical diagnosis, computer search engines, voice or handwriting recognition, and chatbots (Copeland B.J. 2025).

Artificial Intelligence (AI) has rapidly become a frontier of innovation across creative industries, particularly in painting, which is increasingly seen by many as a purely human endeavour. Yet, creativity in painting is increasingly influenced and enhanced by AI technologies. A.I. tools enable artists to explore new forms of expression by generating new ideas and pushing the boundaries of traditional art practices. A.I. tools such as DeepArt, Google's DeepDream, and OpenAI's DALL·E have demonstrated the potential of neural networks to generate visually compelling artworks. For instance, neural style transfer enables artists to apply the stylistic elements of one image to another, creating hybrid compositions that blend classical and contemporary aesthetics (Gatys et al., 2016). Moreover, Generative Adversarial Networks (GANs), introduced by Goodfellow et al. (2014), have been widely adopted in creating entirely new pieces of art by training machines to generate images that mimic the complexity and nuance of human-created paintings. One landmark moment in AI-assisted painting was the auctioning of the AI-generated portrait "Edmond de Belamy" by the Paris-based collective Obvious, which sold for \$432,500 at Christie's in 2018. This event highlighted the growing acceptance and valuation of AI-generated art in mainstream art markets (Christie's, 2018). Rather than replacing human creativity, AI often acts as a collaborator or co-creator, offering artists fresh perspectives and accelerating the creative process (McCormack et al., 2019). Artificial Intelligence is not a substitute for a human artistic talent, "traditional style" but a powerful tool in expanding our creative skill. The integration of human creativity and imagination with computational intelligence opens a new frontier for experimentation, interactivity, and innovation in painting. The relationship that is now intertwined between painting and Artificial Intelligence will continue to redefine the creative boundaries of an artist.

### **Artificial Intelligence tools**

Artificial Intelligence is an embodiment of knowledge, and that embodiment enhances an artist by providing the right tool for the artist's specific purpose. Some of these Artificial Intelligence tools are:

- 1. A.I. Educational and Research tools:** These A.I. tools are innovative and meant for educational purposes, in supporting one in writing a paper, making research about art history and theory. It basically enhances one's cognitive domain. Examples of these tools are:

ChatGPT search, Claude, Gemini, DeepSeek, Grok, Deep Research, NotebookLM, Rytr, Sudowrite

2. **A.I. Creative tool for an Artist:** These A.I. tools are used by artists in different specialisations for different purposes. Some of these tools are used for image manipulation, creating descriptions and analyses of artworks, designing, and other functions. Examples of some of these A.I. tools are: Synthesia, Runway, Filmora, OpusClip, GPT-4o, Midjourney, Canva Magic Studio, Looka, DALL-E 3, Canva, NightCafe Creator, Google's DeepDream, IBM's Watson, Theobot.ai.
3. **A.Social media tools: These tools help in making an artist's work reach a larger audience.** With the help of social media, people from far and near will be able to see your work and get in contact with you. It is also a room to meet with fellow artist of same ideology. Example of some of these tools are: Vista Social, FeedHive, Instagram, Facebook.
4. **A.I. marketing tools:** These tools are designed specifically for sales. This tool helps a painter to market his painting to a larger audience. Examples of these tools are: AdCreative, Clay, Hootsuite, Buffer, Artwork Archive and Art Galleria.

With the energy of Artificial Intelligence creative tools, these tools where innovated to adhere to the following:

- **Accessibility:** AI art generation makes art creation easier and more accessible to everyone. Even people with no artistic abilities can use AI art to create visually appealing pieces.
- **Efficiency:** AI art generation can create large amounts of art within a short period. This can save time and resources that would have been used in traditional manual art creation.
- **Innovation:** AI art generation can help artists innovate by providing new tools and techniques for artistic expression. This can lead to the creation of unique pieces that were previously impossible (Andres, F. 2023).

### **Artificial Intelligence Role in Enhancing a Painter's Creativity**

In recent eras, AI has begun to permeate the realm of human creativity, igniting a fascinating intersection between technology and artistry. This

component demonstrates a departure from the conventional perception of A.I. as merely a computational tool. Instead, it positions it as a co-creator, capable of generating, improving and inspiring artistic expressions (Akim, A. 2014). AI is evolving into a valuable creative tool that enhances the creativity of painters, designers, and creators across disciplines. In the world of visual arts, AI now generates breathtaking paintings, sculptures, and digital art pieces. Most of the time, these creations are known as AI art.

### **A Case Study: Emily's Forest Painting**

- **Identifying the Objective:** Emily, a budding visual artist, was eager to infuse her work with fresh ideas. She wanted to experiment with abstract patterns that could introduce a new dimension to her traditional paintings. By clarifying her objective, Emily set a clear direction for her exploration of AI-generated content.
- **Selecting the Right AI Tool:** After researching various AI tools, Emily settled on Google's DeepDream for its ability to create surreal and abstract images. DeepDream's algorithm uses neural networks to enhance and modify images, making it well-suited to Emily's goal of generating unique visual patterns that she could later integrate into her art.
- **Generating AI-Enhanced Content:** With DeepDream in hand, Emily began the process by selecting a serene image of a forest scene as her starting point. She uploaded the image to the AI tool and used the following prompt: "Transform this forest image into a mesmerising array of colours and shapes that can inspire my next painting." The resulting version bore little resemblance to the original. The once tranquil forest was now a kaleidoscope of vibrant colours and intricate shapes, representing an abstract interpretation of nature.
- **Integrating AI Output:** Having obtained the AI-generated image, Emily prepared her canvas. She used acrylic paints in a colour palette inspired by the AI output's vivid hues. Drawing on her expertise as a traditional painter, Emily meticulously recreated the dreamlike patterns onto the canvas. She carefully selected brushes and techniques that would capture the essence of the AI-generated image while retaining her unique artistic touch.
- **Iterating and Collaborating:** As Emily's painting took shape, she shared her progress with fellow artists and mentors. The collaborative feedback loop proved invaluable in helping her navigate challenges

and make informed decisions about which patterns to emphasise. The input she received not only refined her artistic choices but also validated the innovative direction she was taking.

- Adding Her Artistic Touch: Throughout the process, Emily continuously infused her work with her emotions and perspective. She harmonised the AI-generated patterns with her artistic style, ensuring her voice remained prominent. This integration of human creativity with AI-generated content resulted in a genuinely collaborative painting between artist and machine.

### **Final Words**

Emily's artistic journey culminates in a painting that integrates AI-generated abstract patterns with her distinctive style. The final artwork depicts a tranquil forest scene transformed into a kaleidoscope of vibrant colours and intricate shapes. The abstract patterns, inspired by the AI-generated content, flow organically within the composition, evoking a dreamlike atmosphere that resonated with viewers.

The painting conveys a sense of innovation while staying true to Emily's emotional depth and personal narrative. Here, the collaboration between artist and machine strikes the right balance between the vivid AI-inspired patterns and the nuanced brushstrokes that bear Emily's artistic signature (Andres, F. 2023)

### **Challenges in Using Artificial Intelligence as a Tool in Enhancing Creativity**

1. Using AI might tempt artists to skip traditional skill-building processes. This could lead to a decline in manual techniques and artistic proficiency over time.
2. One of the foremost challenges is preserving the artist's unique voice and authenticity. AI-generated content may sometimes dominate the creative process, eroding the artist's individuality and emotional depth in the final artwork.
3. Relying too heavily on AI-generated elements can hinder an artist's own creative skills. Artists might become dependent on A.I. for ideas, stifling their ability to innovate and think critically.
4. The line between what constitutes the artist's creation and the AI's contribution can become blurred. Artists must grapple with ethical

concerns related to authorship and ownership of AI-generated content. Determining who owns the rights to the AI-enhanced artwork can be complex, particularly when AI generates significant portions of the composition.

## Conclusion

The emergence of Artificial Intelligence (AI) has introduced a new dimension to the creative world of art, allowing artists to explore new ideas and push beyond the boundaries of their creativity and imagination. This study offers insight into how AI can serve as a powerful tool for painters by providing AI-generated creative work and other functions that enhance artistic skill while maintaining traditional style. Artists have long sought innovative ways to express their ideas, and AI is now an embodiment of knowledge, enabling a painter to do so. Whether you're a painter, musician, or writer, this tool can enhance your expertise in your respective field.

## Recommendation

Based on the research, several challenges of Artificial Intelligence have been identified; therefore, it is recommended that a painter use AI.

- Identify and define his or her objectives.
- Make use of the right AI tool that best suits his specialisation and creativity.
- Integrate A.I. outlet by blending AI-generated visuals into a traditional painting.
- Don't limit yourself to using just one A.I. Collaboration can help refine your creative vision and ensure a seamless integration of A.I. elements.
- Add your artistic or, as we say, "traditional touch". When using AI, use AI-generated content as a starting point, and then infuse your unique style into the painting.

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