SMART TECHNOLOGIES IN SCIENCE AND ART

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The intersection of smart technologies – such as artificial intelligence (AI), augmented reality (AR), virtual reality (VR), and big data – with science and art is reshaping how we create, interact, and understand both fields. These technologies are enabling artists and scientists to explore new dimensions, pushing boundaries and fostering collaborations that were previously unimaginable.

This article explores how generative AI is pushing the boundaries of art and architecture. It highlights the work of artist Refik Anadol, who uses AI to create immersive art based on real-world data, such as climate changes or neurological data. Anadol's projects raise awareness of environmental and health issues while showcasing the power of AI in generating new forms of artistic expression (Zach Winn | MIT News, November 29, 2023).

Smart technologies are enabling deeper collaborations between scientists and artists. For example, artists are using scientific tools and data-driven techniques to visualize complex phenomena, like climate data. This blending of science and art helps make abstract concepts accessible to the general public. An example is data art, where real-world datasets are transformed into artistic representations, like the work of Refik Anadol, who uses AI and data to create immersive art (Darrell M. West and John R. Allen, April 24, 2018).

A prominent example of AI can be found in stock exchanges, where high-frequency trading by machines has replaced much of human decision-making. People

submit, buy and sell orders, and computers match them in the blink of an eye without human intervention. Machines can spot trading inefficiencies or market differentials on a very small scale and execute trades that make money according to investor instructions.

In conclusion it should be pointed out that the intersection of smart technologies with science and art offers unprecedented opportunities for innovation and collaboration. These advancements challenge our understanding of creativity and raise important ethical considerations. As we embrace these technologies, it is essential to foster dialogue among artists, scientists, and technologists to navigate their implications responsibly. By doing so, we can enhance our creative and scientific endeavors while ensuring that technology serves to enrich our society.

References:

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