Contributions of artificial intelligence to glass design and production processes "Implemented on design perfume bottles"

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Abstract:

The application of AI has revolutionized traditional design and production methods for designing and manufacturing glass, enhancing efficiency, creativity and overall product quality. The research focuses on the main challenges faced by these industries, specific to AI integration, and emphasizes the importance of these contributions and their impact on each stage.

Research problem: The need to study the multiple capabilities of artificial intelligence technologies, and how to link them to design variables for glass products (perfume bottles).

Research goal: - Developing design processes for glass products (perfume bottles) by taking advantage of artificial intelligence programs to increase alternatives to design ideas and reduce time and effort in design processes.

Research importance: Artificial intelligence systems contribute to the design and production of glass, which increases the opportunities for diversity in design trends and helps reduce effort, time, and thus cost. It also enables designers to explore unique and complex design ideas that are difficult to achieve using traditional methods, which enhances creativity and excellence in design and the consequent development of this industry.

Research hypothesis: Studying the multiple possibilities of artificial intelligence in the field of designing glass bottles for perfumes contributes to enriching design trends in this field, and increases the possibility of developing design education paths in specialized academic systems.

Research limitations: This research is limited to the use of the Midjourney AI application (AI Artistic- Midjourney AI). (Artify- Midjourney AI Generator) and benefiting from it to create designs for perfume bottles inspired by nature to enrich and raise its aesthetic value.

The study found that using AI-based tools can lead to more efficient and cost-effective designs, while improving energy performance and reducing environmental impacts. And improve quality control. It recommends the need to pay attention to modern developments in the field of design and technology using AI and to keep pace with technical development in every possible way

Its problem, especially within educational institutions. There is a need to benefit from AI techniques in the various fields of glass design and production.

KEYWORDS:
AI- glass - design – production.