

Adapting Artificial Intelligence Techniques in Textile Printing Design

Dr.Reham Mohamed Abdelsalam

Lecturer At Department of Textile Printing, Dyeing and Finishing, Faculty of Applied Arts /
Helwan University

Reham2roro@hotmail.com

Abstract:

Artificial intelligence means the ability of the machine to simulate human intelligence and behavior through artificial neural networks capable of perceiving, learning, and deduction, like the human mind, to carry out specific tasks designed for them with great speed and skill by understanding the complex mental processes that take place within the human mind during thinking and translating those mental processes into Numerical arithmetic operations performed by a computer.

Artificial intelligence is the technology of the future due to the diversity of its uses in different fields, so its technologies develop at an amazing speed and its uses spread in all aspects of life. In the field of arts, it contributes to enriching the designer's creative process by accessing a huge amount of artistic designs and alternatives in a short time, which saves the designer's effort and meets the requirements of advanced work that depends on repetitive tasks. Which gave the designer more time for creativity and inspiration.

Artificial intelligence techniques are not limited only to simulating human thought but have extended to include living organisms as a whole, such as simulating the behavior of different types of animals or viruses through data systems and programming languages that represent information and algorithms that have been programmed to understand the mechanism of dealing in the living system and how to store, process, and retrieve data when needed. Effectiveness and flexibility.

Artificial intelligence does not cancel the presence of human intelligence, as the designer is the innovator and developer of artificial intelligence to benefit from its various techniques and methods in enriching the design of printed fabrics.

Keywords

Customization, Artificial Intelligence, Textile printing design