The Impact of Artificial Intelligence in the Development of Textile and Fashion Industry

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Abstract : Fashion, like many other areas of design, has undergone numerous developments over the centuries. The aim of the article is to recognize and evaluate the importance of advanced technologies in fashion design and to examine how they are transforming the role of contemporary fashion designers by transforming the creative process. It also discusses how contemporary culture is involved in such developments and how it influences fashion design in terms of conceptualization and production. The methodology used is based on examining various examples of the use of technology in fashion design and drawing parallels between what was feasible then and what is feasible today. Comparison of case studies, examples of existing fashion designs and experiences with craft methods; We therefore observe patterns that help us predict the direction of future developments in this area. Discussing the technological elements in fashion design helps us understand the driving force behind the trend. The research presented in the article shows that there is a trend towards significantly increasing interest and progress in the field of fashion technology, leading to the emergence of hybrid artisanal methods. In summary, as fashion technologies advance, their role in clothing production is becoming increasingly important, extending far beyond the humble sewing machine.

Keywords : fashion, identity, such, textiles ambient intelligence, proximity sensors, shape memory materials, sound sensing garments, wearable technology bio textiles, fashion trends, nano textiles, new materials, smart textiles, techno textiles fashion design, functional aesthetics, 3D printing.

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