DESIGN AND DEVELOPMENT OF TEXTILE DESIGN FOR ROBOTICS: A CASE ON PARROT ROBOT

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ABSTRACT

Fashion isn't restricted to humans, and neither is the future. With the advent of technology and robots becoming more generally available in the market, for example, robots took up to assist the textile manufacturing process such as sewing, serging fabric layering, which are known as robotics textiles. However, Robotextile can also be regarded as the textiles or clothing for robots. Let us first attempt to comprehend the fashion sector. Fashion isn't just for the ladies on the runway or the wealthy. "Fashion is Everywhere and Everything is Fashion," says Bianca Luini.

Fashion is more than just an aesthetic; it is also a physical element that may link and bridge gaps in expression and information. Clothing can provide a similar function for robots. Robots designed to interact with children should seem and act in a child-friendly manner. Robots working in dangerous environments can be provided with protective suits that protect them from poisonous substances or high temperatures. Similarly, social interaction robots can wear clothing that enhances their expressiveness and capacity to communicate nonverbally. Materials unsuitable for humans, as well as smart fabrics, can be carefully selected and implanted with sensors, allowing the robot to modify its look in reaction to inputs.

As researchers and designers, we have worked on a parrot-like robot and aided learning for autistic children. Robot was initially tested with youngsters in its natural nature, with a plastic body and hiding gears. Children's attention

span and interaction time were shown to be much lower when compared to a robot that was given the appearance of a realistic Indian parrot with contrasting colours like green and red and a softer textured substance on its body. With improvement, our team proposed another version of this robot with a much more cartoon-like Parrot with bigger eyes, plumper cheeks and stomach, long and cushioned wings that also served the goal of cuddling the children. Accessories such as bow ties, caps, and glasses were also suggested for personalization. Not surprisingly, youngsters interacted with this version of Robot far more than the Robot-looking Parrot. Robot fashion, it appears, is not confined to humanoid robots, but also includes drones, pets, and even industrial machinery.

Indeed, fashion will assist robots in becoming better robots. Fashion bridges the gap between humans and robots, In the process of making robots understand humans better it aids in making humans understand robots better as well. With the increase in the number of Robots around us, it will be very important to be able to recognize the Robot and its purpose just by looking at it, and as technology tries to push Robots as good companions for Humans, Humans will want to brush their hair, dress them everywhere, which will open up a new portal for the fashion industry by giving them identity, ethics, and cultural norms. Fashion and the future are both more than meets the eye, but all that meets the creative and imaginative mind.