

Smart Wearable Safety Jacket

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Abstract: *Technology is now pervasive; it surrounds us and ingrains itself into our daily lives. By balancing usefulness and the joy that fashion brings, the Internet of Things (IoT) paradigm and its supporting smart wearables and IoT-based clothing have the potential to make a significant impact. In order to develop technologies that can predict wants and desires, smart garments seek a balance between fashion, engineering, interaction, user experience, cybersecurity, design, and science. These days, seamless and widespread integration of sensors into textiles as well as the creation of conductive yarn are made possible by the fast-moving convergence of textiles and electronics. Potential for processing biometric data such as heart rate, temperature, breathing, stress, movement, acceleration, or even fingerprints using smart fabrics that can interact with smartphones. hormone levels, suggests the dawn of a new shopping era. This article discusses the primary need for creating smart, Internet of Things-enabled clothing and illustrates the potential long-term effects of smart clothing on business models. The basic types and components of smart IoT wearables and clothes are described, their key needs are examined, and some of the most current smart clothing applications are evaluated. Additionally, a worldwide IoT architecture is offered. This article examines the history and current state of smart clothing in order to offer recommendations for the designers of a network that will connect clothing to other IoT devices in the future: Smart Clothing on the Internet.*

Keywords: Internet of Things, e-textiles, electronic textiles, Industry 4.0, biometrics, sensors, smart clothes, smart garments, and wearables

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