Future of Smart Wearable Textile in : 2025

A Glimpse Into the Future of Intelligent Clothing

In an age where innovation meets everyday wear, smart textiles have emerged as a game-changer. With my self-developed Smart Hoodie demo, this fusion of fashion and function has come alive—offering a glimpse into how 2025 will see us wearing not just clothes, but experiences.

Real Innovation

My Smart Hoodie monitors body temperature using a DS18B20 sensor and transmits real-time data to my smartphone via the Blynk IoT platform—powered by the ESP32 microcontroller. It's fashion, fused with function.

Simple Engineering

Wired with jumper cables, battery, and a DS18B20 sensor, the hoodie's core is clean and coded using Arduino—designed for accuracy, reliability, and perfect integration with IoT platforms like Blynk.

Tech in Motion

This project isn't a concept—it's a working demo. As soon as the hoodie touches your skin, your temperature data flows wirelessly to your phone, letting you see real-time metrics on the go.

Vision Forward

This is just the beginning. As we move toward 2025, smart textiles will become mainstream—used in military jackets, hospital uniforms, sportswear, and even everyday outfits. Sensors embedded into fabric can measure everything from heart rate to hydration levels. With AI integration, these wearables could soon predict illnesses before symptoms appear. The future isn't just connected—it's wearable.

Powered by ESP32 & Blynk IoT App for Seamless Real-Time Body Temperature Monitoring

Personal Mission

This Smart Hoodie project represents more than marks—it reflects my passion for coding, electronics, and real-world problem-solving. Guided by my mentor, Ms Arti Jariwala, I pushed beyond theory to develop something tangible. As a student of Vimal Tormal Podar BCA College, Surat, I believe innovation begins when creativity meets code. I'm proud to contribute a spark to the evolving world of smart fashion.

Final Year Innovation by Dhruv Gabani

TY-BCA (SEM-6)