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(57) Abstract :
A wearable safety device for real-time threat detection and automated protective response, comprises of a body 101 worn around the user's neck, a Bluetooth module and GPS module for scanning nearby devices and tracking location in real-time, an inbuilt microcontroller paired with the Bluetooth and GPS modules for logging device identifiers, signal presence duration, and location data, a memory unit for storing the logged information to allow secure access and forensic traceability, a feedback notification module for alerting the user regarding suspicious devices or abnormal physiological signals, a sensing module for detecting distress signals including abnormal health parameters and distress keywords, a plurality of triangular members 105 deployed via motorized hinge 106 to form a protective barrier in response to sudden hand movements, and a plurality of plates 107 mounted on a set of pivot joints 108 to shield the user's face against detected attacks.

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