

# **Wearable Cattle Health and GPS Tracker**

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**Abstract:** *This research introduces a smart wearable system created to monitor cattle health and track their location in real time. The device uses integrated sensors to collect important health data, including body temperature, heart rate, and environmental conditions. A built-in GPS module records the animal's position, while a microcontroller analyzes the gathered information. If abnormal readings are identified, the system sends immediate alerts to farmers through wireless communication.*

*The proposed solution reduces the need for continuous manual monitoring, supports early detection of potential diseases, and improves livestock safety. By combining sensing, data processing, and communication technologies, the system offers an efficient and modern approach to livestock management*

**Keywords:** Cattle health monitoring, wearable livestock device, Arduino-based system, embedded systems, GPS tracking, GSM communication, temperature sensor, heart rate monitoring, smart agriculture, real-time

