Abstract

Today's life human can't imagine their life without technology. The era has modified and developed many projects such as advanced cattle health monitoring system using PIC microcontroller and IoT. The system collects x,y,z axis acceleration data through triaxial accelerometer. The intention of this research is to establish a relationship between dairy cattle diseases with various non-invasive sensors for the development of a health monitoring system. Based on cattle health monitoring system critical parameters affecting cattle health which includes body temperature, respiration, humidity, heartbeat and rumination continuously monitored. ESP8266 Wi-Fi module is used as transceiver. LM-35 is used temperature sensor to monitor the body temperature of the cattle. Two number of ADXL335 accelerometer sensors are used in this wearable device for lameness detection and alerting during pregnancy. MQ-02 smoke sensor is used for detection of smoke level in cattle farm environment. Infra-Red sensor is used for count the occupancy level of cattle in farm for smart lighting and smart ventilation purpose.
References


Index Terms
Computer Science Information Sciences

Keywords
IOT, PICMicrocontroller, ESP-WiFi module, sensors, 3-axial acceleration.