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Low Power Intrusion Detection Using Multi-Level Sensor Authentication

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Abstract: *Surveillance systems be connected with very less cost and less power IR and PIR sensors, which are more capable to find the false alarms and small inference. Wireless smart cameras become an appropriate solution for the upcoming challenges like the hardware capabilities in terms of low - power utilization and high imaging performance and high memory footprint all are very big tasks for the wireless smart cameras. For this reason, wireless surveillance systems still involve a significant aggregate of research in different areas such as mote architectures, video processing algorithms, power management, energy harvesting and distributed engine. Here we evolve a solution for this problem through multilevel sensing architecture. The proposed system to be find the energy interference in the first level. If any unwanted event, it will be occurring at the moment the additional authentication unit become initiate and activities. In this stage, PIR sensor that detects the traces of the event. If the PIR sensor detects the same, it authenticates the event and switches ON the wireless camera. This system has multiple advantages like reduced power consumption, improved event detection accuracy, longer life span and enhanced information clarity.*

Keywords: Embedded smart camera, Power consumption, PIR Sensor, Vibration Sensor, Wireless Sensor Network, RF Transmitter and Receiver.

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