

Integration of Wireless Sensor Networks and Radio Frequency Identification (RFID): An Assessment

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Abstract : RFID (Radio Frequency Identification) and WSN (Wireless sensor network) are two significant wireless technologies that have extensive diversity of applications and provide limitless forthcoming potentials. RFID is used to identify existence and location of objects whereas WSN is used to intellect and monitor the environment. Incorporating RFID with WSN not only provides identity and location of an object but also provides information regarding the condition of the object carrying the sensors enabled RFID tag. It can be widely used in stock management, asset tracking, asset counting, security, military, environmental monitoring and forecasting, healthcare, intelligent home, intelligent transport vehicles, warehouse management, and precision agriculture. This assessment presents a brief introduction of RFID, WSN, and integration of WSN and RFID, and then applications related to both RFID and WSN. This assessment also deliberates status of the projects on RFID technology carried out in different computing group projects to be taken on WSN and RFID technology.

Keywords : wireless sensor network, RFID, embedded sensor, Wi-Fi, Bluetooth, integration, time saving, cost efficient

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