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## **2023**

INTERNATIONAL JASIN MULTIMEDIA & COMPUTER SCIENCE  
INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

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**8th November 2023**  
**Wednesday**

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## 2023

INTERNATIONAL JASIN MULTIMEDIA & COMPUTER SCIENCE  
INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIx) 2023

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## International Jasin Multimedia & Computer Science Invention and Innovation Exhibition



# Sheep Tracker via Radio Frequency Identification (RFID) System

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**Abstract**— The Fourth Industrial Revolution (IR 4.0) has significantly impacted various industries in Malaysia through the digitalization and optimization of daily operational processes, leading to heightened efficiency. It's not just the manufacturing sector that has directly experienced the transformative impact of this revolution; even the livestock industry has been touched by its influence. Within the realm of livestock management, a primary challenge arises in the form of effectively monitoring and tracking animals, specifically sheep, while they graze in the fields. Consequently, this research aims to invent a sheep tracker by implementing Radio Frequency Identification (RFID) system to oversee the movements of each sheep in the pasture. This system involves attaching unique identification tags to every sheep, allowing for precise tracking when the sheep are in proximity to the RFID scanner. On top of that, the comparative study of the existing and proposed tracking systems used on the particular farm are presented. As a result, this innovation indirectly reduces the reliance on human labor for sheep monitoring and mitigates the risk of sheep loss. Furthermore, the implementation of RFID technology on sheep aligns with Sustainable Development Goal 9, focusing on the enhancement of industry, innovation, and infrastructure.

**Keywords**—*Sheep Tracker, Radio Frequency Identification (RFID) System, Livestock Industry*



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