Review of: "Design of a Smart Motorcycle Parking System based on Wireless Sensor Network (WSN) in a Multilevel Building at Universitas Pendidikan Indonesia"

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Potential competing interests: No potential competing interests to declare.

The article titled "Design of a Smart Motorcycle Parking System based on Wireless Sensor Network (WSN) in a Multilevel Building at Universitas Pendidikan Indonesia" addresses the challenges faced by the university's motorcycle parking facility, including congestion, haphazard parking, and safety concerns due to inadequate management. The proposed solution involves the development of a prototype parking system utilizing RFID-based Wireless Sensor Network (WSN) technology. The system employs RFID readers at entrance and exit points, ultrasonic sensors for obstacle detection, and ESP32 microcontrollers for data processing and communication. Through experimentation, the system effectively monitors parking availability, identifies unauthorized parking, and detects obstacles along the pathways. It also imposes fines for unauthorized parking to deter such behavior. The hardware components and software aspects of the system are comprehensively explained, along with the experimental results demonstrating its functionality, including real-time data display on a website accessible to administrators and users. The study concludes that the smart parking system successfully addresses the identified parking challenges, providing a scalable solution for efficient motorcycle parking management.