

International Conference on Artificial Intelligence and Cybersecurity (ICAIC 2025)

Conference Proceedings

November 27-28, 2025 - Japan

Applied IoT Technologies in Agriculture: A Comprehensive Review of the Central Coastal Provinces of Vietnam

Nguyen Quang Linh

Faculty of Animal Science and Veterinary Medicine, Hue University, 102 Phung Hung St. Hue City, Vietnam

Abstract

This study provides a comprehensive assessment of the current implementation and utilization of Internet of Things (IoT) technologies, specifically sensor applications for irrigation management, in the agricultural sector of Vietnam's Central Coastal Provinces. Employing a comprehensive search of scientific articles published within the past decade (English and Vietnamese), we identify key research questions and analyze their fulfillment. Our findings reveal a significant shift in agricultural IoT research, transitioning from theoretical exploration to real-world implementation. This insightful analysis provides a holistic understanding of recent advancements in IoT applications for the Vietnamese agricultural sector, paving the way for further development and optimization.

Keywords: Agriculture, Internet of things, Sustainability, Smart farming, Sensor networks, Central Coastal Provinces Vietnam