Greenhouse Monitoring using ESP 8266

Innocencia Chiyanjano Zuze[1] and Mr Pempho Jimu[2]
Student, Bachelor of Engineering in Computer Science [1]
Project Guide, Bachelor of Engineering in Computer Science [2]
DMI-St. John The Baptist University, Lilongwe Malawi

Abstract: *This research presents a groundbreaking approach to greenhouse agriculture through the implementation of a monitoring and control system using the ESP8266 microcontroller with Wi-Fi connectivity. By integrating sensors to monitor critical environmental factors and automating irrigation, ventilation, and lighting systems, the proposed system optimizes crop growth conditions in real-time, leading to increased yields and resource conservation. Moreover, its remote monitoring and management capabilities empower farmers to make data-driven decisions, ensuring sustainability and resilience in the face of changing environmental conditions. Overall, this research contributes to the advancement of smart agriculture practices, offering a scalable and efficient solution to address food security challenges and adapt to evolving agricultural landscapes*

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