

## ABSTRACT

*This research aims to develop an automatic feeding system for ducks utilizing Internet of Things (IoT) technology based on the ESP32 microcontroller. The system incorporates a load cell sensor (HX711), a servo motor, an I2C LCD display, and a real-time clock module (RTC DS3231) to support its main functions. It is designed to dispense feed on a programmable schedule that can be customized for each day of the week according to the farmer's needs. To enable remote pemantauan and control, the system is integrated with a Telegram Bot, allowing farmers to receive real-time notifications and manage the feeding process from anywhere in an efficient manner. Additionally, a web-based interface is provided through the mDNS protocol, allowing local system configuration without the need for a static IP address. Test results demonstrate that the system reliably dispenses feed with accuracy and punctuality, monitors feed stock levels in real time, and provides timely alerts to the user. This system is expected to improve the efficiency of duck farm management, reduce dependence on manual labor, and ensure consistent feeding practices, ultimately contributing to better livestock health and productivity.*

**Keywords:** ESP32, automatic feeding system, Telegram Bot, Internet of Things (IoT), duck farming