Problem Statement:

An affordable device aimed at automatically regulating temperature in poultry farms to maintain an optimal 35°C, thereby preventing heat stress, minimizing manual water spraying, and ensuring the health and productivity of the birds.

Abstraction:

This project focuses on developing a temperature stabilization system for poultry farms using ESP32 microcontrollers. Aimed at addressing heat stress in tropical climates, the system integrates temperature sensors and actuators to regulate ambient conditions within poultry cages. By continuously monitoring temperature and adjusting ventilation systems (fans or heaters) as needed, the system aims to enhance poultry health and productivity. Through iterative testing and refinement, the implementation seeks to optimize environmental control in poultry farming, contributing to improved welfare and economic outcomes for poultry farmers. This abstract underscores the project's commitment to advancing sustainable practices in agricultural technology.