Automatic Water Pump Control System in Buildings

Name

# Summary or abstract

In modern buildings, water distribution plays a crucial role in ensuring a stable and efficient water supply. Traditional water pump control systems often require manual intervention, leading to inefficiencies, water wastage, and potential system failures. This study focuses on designing and analyzing an automatic water pump control system to optimize water usage and reduce human intervention.

The primary objective is to develop a smart system that automatically controls the operation of water pumps based on real-time water level detection. The methodology involves designing a system incorporating water level sensors, a microcontroller, and a control algorithm that activates or deactivates the pump as needed. The system is tested in a simulated environment to evaluate its effectiveness in maintaining optimal water levels.

Results from the study indicate that the automatic control system significantly improves water management by preventing overflow and dry running of the pump. The system also enhances energy efficiency and prolongs the lifespan of the pumping equipment.

In conclusion, implementing an automatic water pump control system in buildings offers an effective solution for optimizing water distribution, reducing maintenance costs, and ensuring a consistent water supply.

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# Introduction

## Overview

## Problem statement: what are the problems?

## Objectives

## Scope of works

# Literature review (lectures, previous works, formulation….)

# Methodology

## How to archive your work?

## Flowchart (required): From start to the end.

## Explain your flowchart, step by step.

# Results and discussion: Analysis…

# Conclusion

# References

# Appendices (optional)