

IoT-based Classroom Power Consumption Analysis System

Bui Hoang Dung

Abstract: This topic focuses on researching and deploying a power consumption analysis system for classrooms using Internet of Things (IoT) technology. The practical context of efficient energy management in educational facilities is a key reason for proposing this solution. The main objective is to build and evaluate the performance of an energy analysis system based on IoT data, aiming to optimize electricity usage while enhancing monitoring and automatic control capabilities. The research methodology includes designing the IoT infrastructure, collecting and processing data, and then applying analytical models to provide detailed reports on power consumption. The expected outcome is an efficient system that contributes to reducing energy waste and improving operational productivity in schools.

Keywords: IoT Analytics, Energy Management, IoT Systems, Electrical Data Analysis, Energy Usage Optimization