

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama” Belagavi – 590018



Mini Project Report on

**“QUALITY MONITORING OF FRUITS AND
VEGETABLES BY USING IOT”**

Submitted in partial fulfillment of the requirements for the award of degree

**BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING**

Submitted By

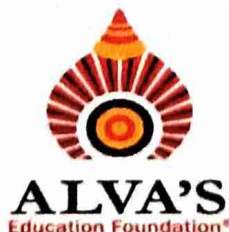
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Under the Guidance of

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

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CERTIFICATE

This is to certify that the following students,

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has submitted Project synopsis on "QUALITY MONITORING OF FRUITS & VEGETABLES USING IOT" for VI Semester B.E. in Electronics & Communication Engineering during the academic year 2023-24. The mini project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.


Mini Project Guide

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ABSTRACT

The rising concern over food safety and waste has prompted the development of innovative technologies to monitor and ensure food quality. This project presents an Internet of Things (IoT)-based system designed to detect food spoilage, aiming to reduce food waste and enhance consumer safety. The system utilizes a network of sensors to monitor environmental parameters such as temperature, humidity, and gas emissions associated with spoilage. These sensors are connected to a central processing unit that analyzes the data in real-time using machine learning algorithms to detect early signs of spoilage.

The data collected is transmitted to a cloud-based platform, where it can be accessed via a user-friendly mobile application. This app provides users with timely alerts and detailed reports on the status of their food items, allowing for proactive measures to prevent consumption of spoiled food. The system is designed to be easily integrate with various storage environments, including refrigerators and pantries, making it versatile and accessible for both household and commercial use.

The results from initial testing indicate that the IoT based food spoilage detection system is effective in identifying spoilage earlier than traditional methods, potentially leading to a significant reduction in food waste and improved food safety. This project demonstrates the feasibility and benefits of integrating IoT technology with food safety monitoring, paving the way for further advancements in smart food storage solutions.