



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Computer Science and Engineering

ABSTRACT

DOMAIN: AIML

PROJECT TITLE: Smart Framework for Identification of Food
Adulteration using IoT

Food adulteration refers to the practice of deliberately adding substances to food to increase its volume, weight or to improve its appearance, texture or flavour, it is a significant issue that affects the health and safety of consumers. With the increasing demand for food, the risk of contamination and intentional addition of harmful substances has increased. There are several existing methods for detecting food adulteration, including Chemical analysis, Microscopy, Sensory analysis etc. While these methods are useful, they can be time-consuming, labour-intensive, and may not provide real-time results. The use of Internet of Things (IoT), Machine Learning (ML) can greatly enhance the ability to identify food adulteration. In this project, we propose a solution to detect food adulteration using IoT and machine learning. The system consists of IoT sensors and devices that can be used to gather data on various parameters such as temperature, humidity, colour etc. The collected data is fed into machine learning algorithms for pre-processing, analysis, and testing and any anomalies or deviations from the normal patterns are flagged for further investigation. ML algorithms can continuously learn from the data collected, allowing them to continually improve their accuracy and effectiveness over time. By implementing this system, we aim to create a real-time, data-driven approach to detecting food adulteration, ensuring food safety and quality for consumers by creating a warning system.

Guide:

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SIGNATURE

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