Food Quality Monitoring System

Hari Abinav S and R. Harinii

B. TECH, Department of EEE

Vellore Institute of Technology, Chennai, India

hariabinav.s2021@vitstudent.ac.in and harinii.r2021@vitstudent.ac.in

Abstract*: Food poisoning affects around 600 million people each year, with 4,20,000 people dying as a result. People frequently ingest damaged meals since there are no obvious signs of deterioration. Foods release gases like Methane, Ethylene and Ammonia when they decompose. This paper introduces Food Spoilage Detection by using sensor and displayed on character 16x2 LCD. We are living in the world, where one third food is wasted every year. It is more than enough to feed millions of people in the world. Most considerable reason for food wastage is food spoilage. Food spoilage can be detected in many ways. Our project mainly focuses food spoilage detection using Sensor. In components used in this project is LCD display, sensors and Arduino Uno. Sensors, LCD display is interfaced to Arduino Uno. By using sensors we can detect the gases coming from food. The sensor sends the data to LCD display where we can view whether food is spoiler. Software required to program Arduino Uno is Arduino Integrated development environment (IDE). Hardware required for this project is Arduino board, MQ3 sensor, character 16x2 LCD, USB cable, power supply and connecting wires.*

Keywords: Arduino Uno, MQ3 sensor, character 16x2 Liquid Crystal Display.

REFERENCES

[1]. T. K. Gannavaram V, U. Maheshwar Kandhikonda, R. Bejgam, S. B. Keshipeddi and S. Sunkari, "A Brief Review on Internet of Things (IoT)," 2021 International Conference on Computer Communication.

[2]. G. C. Green, A. D. C. Chan and R. A. Goubran, "Monitoring of food spoilage with electronic nose: potential applications for smart homes," (2009) 3rd International Conference on Pervasive Computing Technologies for Healthcare, London, 2009, pp. 1-7, doi: 10.1109/PCTHEALTH.2009.5291419

[3]. G. Keshri, N. Magan, P. Voysey. "Use of an electronic nose for the early detection and differentiation between spoilage fungi"(2008)

[4]. NODERED – Professor P.Sriramalakshmi,IOT,Vellore Institue of technology,Chennai