ABSTRACT

Smart kitchen is a system that can maximize the function of surveillance, monitoring, and security. Smart Kitchen facilitate the kitchen to be controlled by the user. This research discusses the kitchen's safety device performance and functions which consist of a gas sensor MQ-6, smoke sensor MQ-135, temperature LM-35 sensors, DC motors to help open the gas regulator automatically and a web camera. The author understands to get a good results, the laying of the security device must be adjusted to the state of the kitchen.

The calibration process must first be performed for each sensor, calibration is performed using the kalman filter, kalman filter improve the accuracy of reading the sensor value that already has a range of numbers 0-1024.

The output of this system is to give a decision, when a fire accident happen in this case an increase in the value of the temperature and smoke levels that are not supposed to be, and when there is leakage, in this case the level of propane. Data output is sent via microcontroller then sends a notification to the user.

Keyword: smart kitchen, internet of things.