

ABSTRACT

Many culinary delights from abroad have entered Indonesia, one example is western culinary, which is a type of culinary originating from the western world. Smoked beef brisket which is now in great demand by many Indonesian citizens. This smoked beef brisket has a fairly complicated cooking technique with a smoking technique that takes 18 hours. During smoking the temperature must be considered so that it can ripen perfectly, the temperature must be constant and there should not be any significant changes. This causes a temperature check at all times.

In this final project the writer designed a system and application for monitoring the combustion temperature based on android. The android application will get data from the temperature sensor that is integrated with NodeMCU. Data from these sensors will be sent to the database using wifi connectivity. The database platform used is the Internet of Things (IoT) Platform, namely Antares. The android application that has been designed will retrieve temperature sensor data from Antares. The results of the data captured by the android application will be displayed.

The results of this study show the system works well and produces the smallest delay of 0.02689 seconds, the largest throughput of 1575.8 bytes / s and the smallest packet loss of 0.02145 percent with the Line of Sight scenario with a distance of 5 meters. For the Non-Line of Sight scenario, the smallest delay is 0.02755 seconds, the largest throughput is 1402.2 bytes / s and the smallest packet loss is 0.03394 percent with research in room 1, which is 9 meters away.

Keywords: Application, NodeMCU, IoT, Antares