# ABSTRACT

*In the world of health, infusion is a tool that is often used, according to its function, namely to provide fluids to patients so that patients do not lack body fluids. At this time, infusions in hospitals are generally still checked periodically manually, the dose of infusion drops per minute is still done by paying attention to the clock and the nurse checks the state of the infusion every few minutes. We can imagine the difficulties of the nurses who have to check every patient's room to makesure the infusion is still there or has run out, while the number of patients and the number of nurses are far apart. Therefore, a system was designed that could monitor or monitor infusion automatically based on IoT (internet of things).*

*The system designed can measure the volume of infusion in the infusion flask and count the number of drops of infusion fluid that fall from the infusion flask. This infusion monitoring system is equipped with a loadcell sensor to detect the volume of infusion fluids and an LM393 sensor to count the number of infusion drops that fall, NodeMCU ESP6288 to store and send data to the IoT platform which is then sent again to the web server on the nurse's desktop and the desktop will display the data. . The desktop display is created using HTML programming.*

*The results of testing the data in this study are that the sensor used in this study has an accuracy of 98% for the loadcell sensor, 97% for the LM393 H2010 sensor and drip control with an accuracy of 83%, which means that the sensor and control system in an infusion-based monitoring tool IoT is running well. In this test it was also successful in implementing data communication using the ESP8266 microcontroller which can send data from sensors to the Antares IoT platform and web user interface.*

***Keyword: Infusion, Monitoring, Patient, Nurse, IoT***