ABSTRACT

This study aims to develop and implement an Internet of Things (IoT) based gyro sensor reading system to measure RPM (Rotations Per Minute), gyro, and tilt information on the measured object. The sensor used in this system is designed to detect orientation changes and movements in the attached object. During the development phase, the researchers selected sensors that suit the usage requirements and designed a hardware interface capable of communicating with the software that is, LM393 speed censor and MPU6050 gyroscope censor. Subsequently, the system was equipped with an IoT communication module that enables access and monitoring of the measured data through Blynk. The integrated data processing method allows real-time display of RPM values, gyro data, and tiltof the measured object in a user interface. The test results show satisfactory sensorreading accuracy and fast response time, making this system suitable for various applications that require accurate monitoring and measurement of object motion and orientation. The implementation of this IoT-based gyro sensor reading system holds significant potential in various fields, including industries, transportation, and wearable devices. Its ability to measure RPM, gyro, and tilt values with high precision and transmit data wirelessly over the internet connection opens up new opportunities for real-time data monitoring and analysis. In conclusion, this research has successfully produced a reliable and efficient IoT-based gyro sensor reading system, which is expected to contribute positively to advancing sensor technology and IoT applications for future needs.

Keywords: IoT, gyroscope, LM393 sensor, MPU 6050 sensor.