

Framework for collecting data from IoT Device

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Abstract

The Internet of Things (IoT) is the most significant and blooming technology in the 21st century. IoT has rapidly developed by covering hundreds of applications in the civil, health, military, and agriculture areas. IoT is based on the collection of sensor data through an embedded system, and this embedded system uploads the data on the internet. Devices and sensor technologies connected over a network can monitor and measure data in real-time. The main challenge is to collect data from IoT devices, transmit them to store in the Cloud, and later retrieve them at any time for visualization and data analysis. All these phases need to be secure by following security protocol to ensure data integrity. This work presents the design of a lightweight and easy-to-use data collection framework for IoT devices. This framework consists of collecting data from sensors and sending them to Cloud storage securely and in real-time for further processing and visualization. Our main objective is to make a data-collecting platform that will be plug-and-play and secure so that any organization or research team can use it to collect data from any IoT device for further data analysis. This framework is expected to help with the data collection from a variety of different IoT devices.