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IoT based Climate Monitoring System using Arduino

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Abstract: The Internet of Things (IOT) defines the interconnection of devices & people through the traditional internet & social networks for various day-to-day applications like climate monitoring, Healthcare systems, smart cities, irrigation fields & smart lifestyles. The climate monitoring system plays important role in our daily life So, in this paper, we present an automatic climate monitoring system that permits having real-time climate data of a particular place. The advanced system uses ESP 8266 module & which is implemented on the Arduino platform and is used to recover the data from the cloud. The main purpose of this system is to sense the climate parameters, like temperature humidity, rain & survival of some gases based on the sensors & sends the information to the Thing speak server & then plot the sensor data as graphical statistics. Updated data from the implemented system can access the internet from anywhere in the world.

Keywords: Internet of Things (IOT); Embedded computing system; Arduino software, ESP8266, Smart Environment

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