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Abstract

Cloud computing is a major pattern for large data storage and analytics. The combination of cloud computing and IoT can allow the resource sharing more proficiently than individually handling them. In distributed systems, the resources are labelled as cloud services and handled in a centralized way. However, new challenges arise when integrating cloud with IoT. This paper offers the architecture for integrating of cloud computing for Internet of Things and its issues. Cloud computing has long been recognized as an exemplar for big data storage and

analytics. The combination of cloud computing and IoT can enable omnipresent sensing services and powerful processing of sensing data streams beyond the capability of individual “things”, thus stimulating improvements in both fields. With the trend going on in ubiquitous computing, everything is going to be connected to the Internet and its data will be used for various progressive purposes, giving rise to not only information from it, but also, knowledge and even wisdom. Internet of Things (IoT) becoming so pervasive that it is becoming vital to integrate it with cloud computing because of the amount of data IoT’s could generate and their requirement to have the privilege of virtual resources consumption and storage capacity, but also, to make it possible to create more usefulness from the data produced by IoT’s and develop smart applications for the users. For instance, cloud platforms permit the sensing data to be stored and used intelligently for smart monitoring and actuation with the smart devices. Artificial intelligence techniques and machine learning procedures can be implemented and run centralized or distributed on the cloud to attain automated decision making. These will boost the evolution of new applications such as smart cities, and transportation systems.

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Index Terms

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