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Fog computing based ultrasound nerve segmentation system using deep learning for mIoT

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Abstract

Internet of Things is an ever expanding field and applications can be used for medical field. Patient monitoring and diagnosis can be done with the help of IoT and the problems of storing large amount of data can be solved by using cloud computing. However, when transmitting large amount of data through the network, the latency will be impacted. This can be eliminated by introducing a fog layer for the processing of data and processed data later can be stored in the cloud. This study proposes a novel architecture for a hospital ultrasound system and deep learning algorithm is used for the nerve segmentation and a good accuracy is achieved.

I. Introduction

Internet of Things (IoT) is a rapidly growing technology and this is used in different fields. Internet means an interconnected network and usually internet is an interconnected network of computers. But in IoT, it is interconnected network of Things. Things can be any object or device like refrigerators, television, air conditioners etc, as well as humans. Since all these things are interconnected, they can be accessed through the internet remotely. There are advantages as well as disadvantages of IoT. With the help of IoT, the resources can be used efficiently. For example, if a person forgot to switch off the air conditioner after leaving home, he can switch it

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