

# Foreword and Editorial

## **International Journal of Internet of Things and its Applications (IJIoTA)**

We are very happy to publish this issue of an International Journal of Internet of Things and its Applications by Global Vision School Publication.

This issue contains 2 articles. Achieving such a high quality of papers would have been impossible without the huge work that was undertaken by the Editorial Board members and External Reviewers. We take this opportunity to thank them for their great support and cooperation.

The paper entitled “Performance Estimation Method on IoT-Cloud Environments Using Hybrid Deep Neural Network”, the IoT-Cloud virtual machine system is a virtual machine-based solution for low-performance IoT (Internet of Things) devices. It uses an offloading method that delegates tasks with high computational complexity to a high-performance cloud server. The offloading technique can reduce the execution performance depending on the workload of the IoT devices and the clouds. Therefore, it is necessary to decide offloading execution considering the workload of the IoT devices and the clouds.

In this paper, CPU utilization trend, which is one of the workload indices, is predicted through deep learning in order to decide offloading execution considering the workload of the IoT devices and clouds. The predicted CPU utilization trend is indicative of future CPU utilization information and is therefore an indicator for offloading execution decisions.

In the paper “An Empirical Study on the Adoption Intention of IoT Based Smart Gas Safety Shutoff Device Service”, to keep a pace with the trend of IoT (Internet of Things) era, the society has recently given impetus to installing in a building and an apartment wireless remote control system for such public home service as gas, electricity, and water supply based on unique smart home network to pursue facility convenience and safety. Upon the demand of consumers, construction companies and architects want to provide consumers with various services in wire/wireless integrated mode from opening/closing of a gas valve to prevent an accident from gas leakage to controlling of a gas boiler, automatic fire extinguishing, remote opening/closing of a gas valve, gas alert, gas pressure, gas leakage, ventilation, and so on.

the present research conducted an empirical study with general consumers who fully understand IoT-based gas safety shutoff service to know how they perceive such service and the impact that such perception has on their intention to adopt the service. In addition, this study takes a different approach from existing studies in proposing the importance of consumers' perceived value and intention to adopt in the process of activating IoT-based gas safety shutoff service, and tries to bring forth basic data for the activation of the relevant areas not only academically, but also in practice.

August 2018

**Editor of the August Issue on  
International Journal of Internet of Things and its Applications**