

Foreword and Editorial

International Journal of Mobile Device Engineering(IJMDE)

We are very happy to publish this issue of an International Journal of Mobile Device Engineering 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 under taken by the Editorial Board members and External Reviewers. We take this opportunity to thank them for their great support and cooperation.

The paper entitled "BLE Beacon-Based Indoor Position Tracking", As smart phones are rapidly spreading these days, researches are increasing to provide position-based services for indoor spaces. Each of these technologies has both strengths and weakness. Even UWB, which has the most precise, wide and dynamic positioning capability, requires infrastructure such as transmitter and receiver like Bluetooth, and in order to apply the fingerprinting technology to complement the RSSI of Wi-Fi, it is required to map a reference point that divides the entire space to be applied. This paper proposes a plate technique that improves low accuracy and the large position estimation deviation against existing BLE based RSSI technique. In addition, we propose an algorithm that enhances the accuracy and efficiency of indoor positioning system by integrating the PDR technique using IMU data of terminals. As the result of this study, it is confirmed that the accuracy of direction and moving distance, with positioning error within 2.2m, is applicable to indoor navigation system for the very large spaces such as airports and stadiums.

In the paper "Research for Applying Big Data System to Internet of Things devices using Web Technology", through the 4th Industrial Revolution, Big Data made great progress. This is because the shared data has increased as all things are connected through the Internet. Internet of Things devices have become the subject of data collection. Until now, however, the role of Internet of Things devices has been focused on collecting data because it has been developed on small size and low price environment. Therefore, there was little attempt to proceed with big data operation on the Internet of Things device. However, the performance of Internet of Things devices is gradually improving, and the amount of devices is increasing. Therefore, it is expected that it can play a role in the calculation of big data based on a large number of devices. Therefore, in this paper, we propose a system for operation, not a collection of big data, on Internet of Things devices. We will apply web technology to provide integrated data collection and computing environment for the system, and discuss advantages and improvement points of proposed system.

October 2018

**Editors of the October Issue on
International Journal of Mobile Device Engineering**