Welcome Message from DC2 2014 International Workshop Organizers

Nowadays, cloud computing is commonly used as a service infrastructure. As the computing paradigm shifts to cloud computing, most people think that a device could get less powerful than before because the computing resources could be elastically accessible from the device anytime/anywhere when the user wants to use it. However, most smart devices including smart TV and mobile phones are still getting more powerful, even than workstations 10 years ago. Therefore, we believe that there is no problem to build the user's personalized customized computing environment with his/her powerful devices and even it can create the opportunity for device vendors to create new experience to users. In this workshop, we introduce the concept of the Device Centric Cloud (DC2), using the device's resources as part of cloud computing in order to provide cloud services more efficiently. In DC2, we found out that some functionality such as data storage, data processing and user authentication can be migrated from cloud servers to devices. Additionally, through the analysis of the existing service’s personal agent and search, we make the suggestion on which functionalities in the server for each service can be migrated to the device for more effective services. For Cyber-Physical Systems (CPS) where Cyber world by cloud and Physical world by devices are interworking for safety, efficiency, and entertainment, DC2 will be useful. Based on DC2, more practical CPS applications will be designed and implemented in our living domains, such as wearable computing, smart home networks, vehicular networks, and medical systems. This workshop will be able to make a good starting venue to discuss these CPS applications based on DC2. Finally, DC2 can create the new business opportunities for the industries with new services such as login-free service and personalized service without the explicit user login process.

Soohong Daniel Park, Samsung Electronics, Korea
Jaehoon Paul Jeong, Sungkyunkwan University, Korea
Inchul Hwang, Samsung Electronics, Korea

DC2 2014 Co-Chairs