

IoT Research Center

Keywords

Communication of Things, IoT, M2M, MTC, D2D

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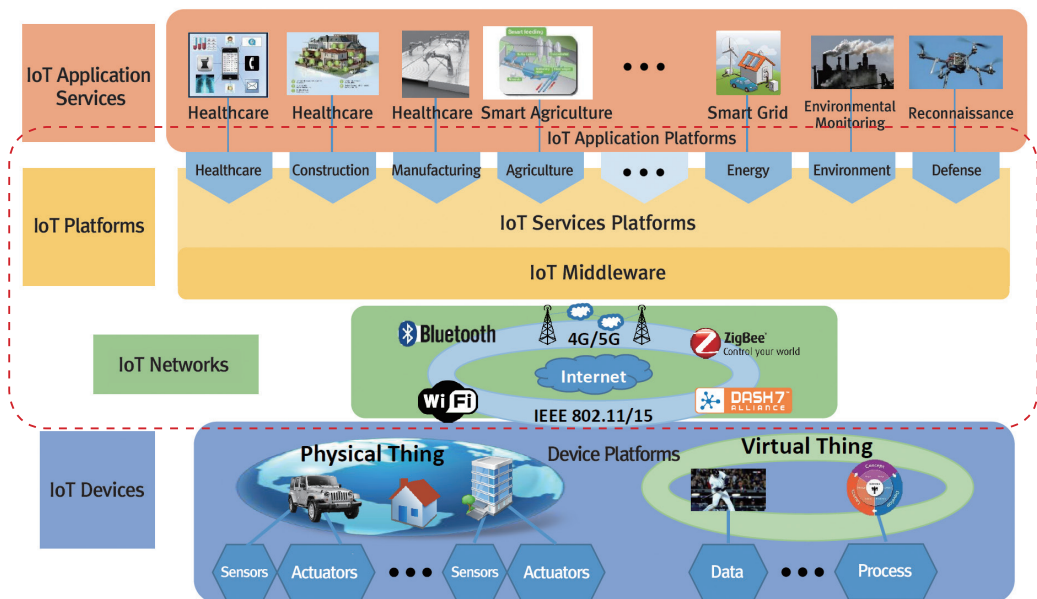
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Current Projects

The fields of the research of IoT are broadly divided into fields of IoT Application Service, IoT Platforms, IoT networks, and IoT Devices. The Research Center of IoT Technology is currently concentrating its resources on fields of the IoT Platforms (Service Platforms, Middleware) and Infra-technology of Networks.



[Components of IoT Service System]



Overview of Developed Technology

Definition of Technology (Title of Technology) The Cognitive Home & Application Service Platform/Middleware Technology

Researcher in Charge	Kim, Tae-seok	Division	Department of Computer Engineering
Principles of the Technology	<ul style="list-style-type: none"> ■ The Establishment of diverse Open Source based Cognitive IoT Service Demonstration Environment & Test Beds ■ The Application of Open Architecture Platforms enabled the Interfacing with Integrated Smart Sensors of Bio-signals 		
Applications	IoT based Service Platforms/Middleware		
Keywords	Cognitive, Smart Home, Platforms, Middleware		

Definition of Technology (Title of Technology) The Signals Relay Technology to support Ceaseless Wireless Connection & Transmission between IoT Devices

Researcher in Charge	Chung, Young-uk	Division	Department of Electronics
Principles of the Technology	<ul style="list-style-type: none"> ■ The Routing Algorithm taken the Relay Link into account ■ The Efficient Wireless Backhaul Technology ■ The Resource Allocation Technology taken the account of Wireless Backhaul and Relay Link 		
Applications	4G/5G mobile communication, IoT, M2M, D2D, MTC		
Keywords	relay, wireless backhaul, routing, resource allocation		

Patents

- The System and Methods of Tele-Screen Service using the Terminal Units in Public, 10-2014-0184389, 2014.12.19
- The Method and Equipment of Database Compression, 10-2014-0117961, 2014.09.04
- The Method and System of Users' Location Based Contents Streaming Service Provision, 10-1395529, 2014.05.08
- The Method to Terminate Relays and the Multi-Hop Relay System for the Termination, 10-1386213, 2014.04.10

Current Projects

- The Development of Object Oriented Integrated Image Media Processing Technology, 2014, ETRI
- The Development of SDN based Entrepreneurial Femtocell-WIFI Integrated Network Framework for Mobile Data Offloading, 2014, Small and Medium Business Administration
- The Study on the Reduction of Mutual Coherence in a Wireless Internet Environment to Facilitate the Usage of Smartphones, 2014, National Research Foundation of Korea
- The Intelligent Customized Learning Control and Operation Employed the technology of Cloud Computing and Big Data, 2014, Small and Medium Business Administration

Publications

- Adaptive Multiple TCP-connection Scheme to Improve Video Quality over Wireless Networks, 2014, KSII Transactions on Internet and Information Systems
- RIX-MAC : an energy-efficient receiver-initiated wakeup MAC protocol for WSNs, 2014, International Journal of KSII Transactions on Internet and Information Systems
- Modeling and Performance Analysis of an Improved Movement-Based Location Management Scheme for Packet-Switched Mobile Communication Systems, 2014, The Scientific World Journal
- Packet Scheduling Mechanism for Multimedia Services to Guarantee QoS in 3GPP LTE System, 2014, International Journal of Computer Science and Network Security