

•Field Internet of Things, Wireless & Mobile

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## I Educational background

2011–2013: Korea University (Doctor of Engineering - The Department of Electronics and Computer Engineering)

2004–2006: Korea University (Master of Engineering - The Department of Electronics and Computer Engineering)

1999-2004: Korea University (Bachelor of Engineering - The Department of Electronics and Computer Engineering)

### Major careers

• 2020 ~ 현재 IEEE Senior Member

• 2018 ~ 현재 한국연구재단 전문위원

• 2016 ~ 현재 한국전파진흥협회 자문위원

• 2019 ~ 2020 Oregon State University, Visiting Scholar

• 2009 ~ 2013 KT 융합기술원, 선임연구원

• 2006 ~ 2009 삼성전자 DMC연구소, 선임연구원

• 2005 ~ 2005 인텔 코리아 R&D센터, 연구원

### Studies & Books

### □연구분야

- $\bullet \ \ \text{Internet of Things, Cyber Physical Systems, Industrial Internet, Industry } 4.0$
- · Energy Harvesting, Wireless Powered Communication Networks
- Artificial Intelligence, Deep Learning, Big Data Analytics

### □연구 및 저서(최근 5년)

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- Wake-Up Radio Resilient Scanning Mechanism for Mobile Device in IEEE 802.11ba, SENSORS AND MATERIALS, vol. 30, no. 12, pp. 2961 2968, 2018. (SCIE)
- Investigation of the Electrical Characteristics of Bilayer ZnO/In2O3 Thin-Film Transistors Fabricated by Solution Process, Materials, vol. 11, no. 11, pp. 2103:1-2103:10, 2018. (SCIE)
- FS-IIoTSim: a flexible and scalable simulation framework for performance evaluation of industrial Internet of things systems, JOURNAL OF SUPERCOMPUTING, vol. 74, no. 9, pp. 4385 4402, 2018. (SCIE)
- Distributed Sensor Scheduling Scheme Using Euclidean Distance for Large-Scale Internet of Things Local Networks, SENSORS AND MATERIALS, vol. 30, no. 8, pp. 1853 1858, 2018. (SCIE)
- Load-Balanced Resource Directory Architecture for Large-Scale Internet of Things Local Networks, SENSORS AND MATERIALS, vol. 30, no. 8, pp. 1817 1824, 2018. (SCIE)
- Implementation of Integrated EHR and mPHR Datasets for Improving Healthcare Services, SENSORS AND MATERIALS, vol. 30, no. 8, pp. 1885 1890, 2018. (SCIE)
- Uplink scheduling of MU-MIMO gateway for massive data acquisition in Internet of things, JOURNAL OF SUPERCOMPUTING, vol. 74, no. 8, pp. 3549 3563, 2018. (SCIE)

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- CLUSTER HEAD ELECTION METHOD AND SENSOR NODE USING THE SAME, KR10-1886230, 2018.08.01
- APPARATUS AND METHOD FOR WIFI BACKSCATTER UPLINK COMMUNICATION, KR10-1883468, 2018.07.24
- DATA TRANSMISSION SYSTEM AND METHOD, KR10-1878192, 2018.07.09
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- OBSERVATION PERIOD ADJUSTMENT SYSTEM AND METHOD OF CoAP SERVER, KR10-1825210, 2018.01.29
- USER TERMINAL AND OPERATION METHOD THEREOF, KR10-1810233, 2017.12.12
- Data Transferring Method between Device/Gateway and Network Application Server, KR10-1807312, 2017.12.04
- METHOD FOR FULL DUPLEX COMMUNICATION IN WIRELESS SENSOR NETWORKS ENVIRONMENT, KR10-1805654, 2017.11.30
- + APPARATUS FOR PROVIDING TRAFFIC MOVING IMAGES, KR10-1786583, 2017.10.11
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# Others

- · Affiliated Society
- -IEEE (Institute of Electrical and Electronics Engineers)
- -IEICE (The Institute of Electronics, Information and Communication Engineers)
  -KICS (The Korean Institute of Communications and Information Sciences)
- -KIISE (The Korean Institute of Information Scientists and Engineers)