



## 김학선 Hak-Sun Kim

전기전자공학과 / Electrical Engineering

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LAB Engineering BULD 3. 405-1

### Curriculum Vitae

.2017~ Current : Professor, UNIST  
 2015~2016 : EVP, TV Development  
 Team Leader, Samsung Display  
 2013~2014 :EVP/CTO, Samsung  
 Display  
 2009~2012 : VP, Samsung Display  
 2008~2009 : VP, Samsung electro-  
 mechanics  
 1993~2008 : Professor, Hanbat  
 National University

### Academic Credential

1993 : Ph. D. Electronic Engineering,  
 Korea Aerospace University  
 1990 : M.S. Electronic Engineering,  
 Korea Aerospace University  
 1986 : B.S. Electronic Engineering,  
 Korea Aerospace University

### Awards/Honors/Memberships

- Order of the Industry Dong-Tap,  
 2014  
 -The Korean Information Display  
 Society(KIDS) award, 2014  
 Vice Chairman of Society of standard  
 and Standardization, KIDS  
 Member of IEEK  
 Member of KICS  
 Member of Kiees  
 Member of SID/KIDS

## Internet of Things System Lab.

### 사물인터넷 시스템 연구실

The Internet of things (IoT) is the inter-networking of physical devices, vehicles(also referred to as "connected devices" and "smart devices") buildings, and other items-embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data. We are studying special target sensing technology, and wireless Communication Standards for IoT, and Data filtering for compensation.

인터넷을 이용한 사물간의 통신을 활용하여 위치의 파악, 데이터의 수집, 가정이나 상점,공장의 자동화를 실행하며 센서에 의해 수집된 Big Data를 처리하여 4차산업혁명을 이끌수 있는 시스템을 구축한다. 센서에 관한 연구와 이들을 연결하는 통신방식들 (Zigbee, Bluetooth, Wi-Fi, Cognitive Radio, Ultra wide band, 5G 등)의 표준을 제정하고 데이터의 정확도를 위한 Filtering 기법들을 연구한다.

아울러 빛의 효율성을 찾아내고 이들을 활용한 Therapy 기술도 연구한다.

#### 관심분야

IoT System, Sensing System, Data gathering System, Data Filtering system, Light wave Engineering

#### 희망분야

Visible Light Therapy, Pet TV Contents and Platform, Magnetic Wave Communication System.

## Research Keywords and Topics

IoT System/Sensing Technology for Special Target, Multi-layer wireless communication.  
 Futher Display Technology/Color control of wearable, Stretchable Display.  
 Light wave engineering for human body therapy.  
 Pet Display.

## Research Publications

.HS kim, WS Park, Ji Back, BS Lee, DS Yoo, SJ Park,"Continuous irradiation with a 633-nm light-emitting diode exerts an anti-aging effect on human skin cells", INTERNATIONAL JOURNAL OF MORECULAR MEDICINE, Vol.35 no.2, pp.383-390, 2012.02  
 .E Lee, S Kim, HR Park, J Bae, S Lee, HS Kim,"A study on the ergonomic aspects of the proper luminance level of displays", Journal of Information Display, Vol.13 no.4,pp.159-166, 2012.12  
 .O Lee, KH An, H Kim, DH Lee, J Han, KS Yang, CH Lee, HS Kim, J Laskar,"Analysis and Design of fully integrated High power parallel circuit Class-E CMOS power amplifier",IEEE Transaction on circuits and systems I- Regular paper, Vol.13 no.4,pp725-734,2010.03

## Patents

Electronic Device Providing a bioeffect image, 101703748(2017)  
 Flexible Touch Screen Panel and flexible display device with the same panel, 101401406(2014)