

Jung Wook Park

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Ph.D. Student

School of Interactive Computing, College of Computing

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RESEARCH INTERESTS

Collective Sensing, Human Sensor, Wearable Computing, and Human-Computer Interaction

EDUCATION

Georgia Institute of Technology, Atlanta, Georgia

Aug. 2016 – Present

Ph.D. in Computer Science

Advisors: Drs. Gregory Abowd and Rosa Arriaga

Ajou University, Suwon, South Korea

Mar. 2008 – Feb. 2010

Master of Science in Electrical and Computer Engineering

Thesis: "Activity Recognition for Child Home Accident Prevention using Wearable Sensors"

Advisor: Dr. We-Duke Cho

Ajou University, Suwon, South Korea

Mar. 2003 – Feb. 2007

Bachelor of Science in Electrical Engineering

Advisor: Dr. We-Duke Cho

RESEARCH EXPERIENCE

Georgia Institute of Technology, Atlanta, Georgia

Research Assistant – School of Interactive Computing

Aug. 2016 – Present

Establish collective sensing frameworks

Yonsei University Health System, Seoul, Korea

May 2016 – June 2016

Researcher – Health-IT Acceleration Platform Technology Innovation Center

Designed international medical information standards

Carnegie Mellon University, Pittsburgh, Pennsylvania, USA

July 2015 – Mar. 2016

Visiting Researcher – Human-Computer Interaction Institute / Dr. Anind Dey

Devised tools and algorithms for understanding human behavior and emotion

LG Electronics Inc., Seoul, South Korea

Sept. 2012 – June 2015

Research Engineer (Military Service) – Creative Innovation Center, CTO Division

Designed wearable and Internet-of-Things devices by experimental prototyping

BIT Computer Co. Ltd. , Seoul, South Korea Research Engineer (Military Service) – Ubiquitous Healthcare Department Conducted several research projects regarding ubiquitous healthcare	Mar. 2010 – Aug. 2012
University of Florida , Gainesville, Florida, USA Visiting Researcher – Mobile and Pervasive Computing Laboratory / Dr. Sumi Helal Developed assistive smart devices for children with mucopolysaccharidosis, the elderly, and the visually impaired	Sept. 2008 – Feb. 2010
Ajou University , Suwon, South Korea Research Assistant – Ubiquitous System Laboratory / Dr. We-Duke Cho Invented core technologies and interactive devices for ubiquitous home services	Oct. 2006 – Dec. 2009
Center of excellence for Ubiquitous System , South Korea Associate Research Engineer – Well-being Life Care Team Devised an anti-stress solution and smart objects for well-being	May 2005 – Dec. 2009

AWARDS

Mobile App Development Competition Award by SMBA, Korea	2010
Ajou University Graduate Fellowship	2007, 2009
University of Florida Research Assistantship	2008
Ubiquitous Computing and Networking Foundation Research Scholarship	2008

CONFERENCE/WORKSHOP ORGANIZATION

Co-Organizer , The 3rd International Workshop on Ubiquitous Mobile Instrumentation (UbiMI 2016), Heidelberg, Germany	2016
Web Chair , The 19th Annual International Conference on Mobile Computing and Networking, (ACM MobiCom 2013), Miami, Florida, USA	2013
Online Community Chair and Registration Co-Chair , The 11th ACM International Conference on Ubiquitous Computing (ACM Ubicomp 2009), Orlando, Florida, USA	2009

OTHER EXPERIENCE

Mentor , Division of General Education, Ajou University, South Korea Counseled 50 freshmen for their successful college life funded by the Ministry of Education, Science and Technology	2009
President , Student Council of the Department of Electrical Engineering, Ajou University, Korea Devised expansion plans for the Department of Electrical Engineering and held ceremonies for building friendship and solidarity	2003

PRESENTATIONS

- "Developing Mobile Applications using Emerging Technologies" 2011
Embedded SW and Cloud Computing Seminar organized by National IT Industry
Promotion Agency (NIPA)
- "TouchView: Assistive Device for MPS Children" 2009
University of Florida - University of Dundee Research Exchange

PUBLICATIONS

- Jung Wook Park**, SeungJun Kim, and Anind K. Dey, "Integrated Driving Aware System in the Real-World: Sensing, Computing and Feedback", *CHI '16 Extended Abstracts on Human Factors in Computing Systems (CHI EA '16)*, San Jose, CA, USA, May 2016
- Jang-Ho Park, Dae-Geun Jang, **Jung Wook Park**, and Se-Kyoung Youm, "Wearable Sensing of In-Ear Pressure for Heart Rate Monitoring with a Piezoelectric Sensor", *Sensors (MDPI)*, vol. 15(9), pp. 23402-23417, 2015
- Young Sung Kim, Jang Ho Park, and **Jung Wook Park**, "New Pulse Rate Monitoring in Ear-Using a Piezoelectric Sensor", *The 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13)*, Osaka, Japan, 2013
- Yunyoung Nam and **Jung Wook Park**, "Child Activity Recognition Based on Cooperative Fusion Model of a Triaxial Accelerometer and a Barometric Pressure Sensor", *IEEE Journal of Biomedical and Health Informatics*, Volume: 17 , Issue: 2, 2013
- Yunyoung Nam and **Jung Wook Park**, "Physical Activity Recognition using a Single Triaxial Accelerometer and a Barometric Sensor for Baby and Child Care in a Home Environment", *Journal of Ambient Intelligence and Smart Environments*, 5(4), 381–402, 2013
- Jung Wook Park** and Abdelsalam(Sumi) Helal, "TouchView: Cognitive Assistance for MPS Children", *The 11th ACM International Conference on Ubiquitous Computing (Ubicomp) 2009*, Florida, USA, 2009
- Jung Wook Park**, Chao Chen, Hicham Elzabadiani, and Abdelsalam (Sumi) Helal, "SmartPlug: Creating Self-Sensing Spaces using Atlas Middleware", *The 11th ACM International Conference on Ubiquitous Computing (Ubicomp) 2009*, Florida, USA, 2009
- Heyoung Lee, **Jung Wook Park**, and Abdelsalam (Sumi) Helal, "Estimation of Indoor Physical Activity Level Based on Footstep Vibration Signal Measured by MEMS Accelerometer for Personal Health Care Under Smart Home Environments", *The 2nd International Workshop on Mobile Entity Localization and Tracking in GPSless Environments (MELT09) held in conjunction with Ubicomp 2009*, Orlando, Florida, USA, 2009
- Jung Wook Park**, Yoo Suk Jung, Hui Jung Park, Soon Dong Kim, and We-Duke Cho, "WIS: A Well-being Index based Health Care System in Smart Home", *The 7th Annual IEEE International Conference on Pervasive Computing and Communications (Percom) 2009*, Galveston, Texas, USA, 2009

Jung Wook Park, Soung Hun You, Hui Jung Park, and We-Duke Cho, "Development of Baby Caring System by Utilizing Context-Awareness", *International Symposium on Ubiquitous Computing System(UCS2007)*, Tokyo, Japan, 2007

Soung Hun You, Hui Jung Park, U In Byun, Tae Soo Kim, **Jung Wook Park**, and We Duke Cho, "Developing Intelligent Smart Home by Utilizing Community Computing", *International Symposium on Ubiquitous Computing System(UCS2007)*, Tokyo, Japan, 2007

PATENTS

"Mobile Terminal and Method for Sharing Data Thereof"

South Korea, 2014 | Application Number: 1020150099939

"Wearable Glass-type Device and Method of Controlling the device"

South Korea, 2013 | Application Number: 1020150056359

"System for Detecting Sleep Disorder with Sensor Unit Attached to Trousers"

South Korea, 2012 | Patent Number: 1013876140000

"In-Ear Type Apparatus for Measuring Number of Mastication and System for Correcting Abnormal Mastication Habit"

South Korea, 2011 | Patent Number: 1011985980000

"In-Ear Type Apparatus for Measuring Blood Pulse and In-Ear Type Hearing Aid Capable of Measuring Blood Pulse"

South Korea, 2011 | Patent Number: 1012255540000

"Toddler care system and method"

South Korea, 2012 | Patent Number: 1011313290000

TECHNICAL SKILLS

Processors:	nRF24LE1, nRF51822 (Bluetooth Low Energy + Cortex M0+), 8051, Atmega128(L), ARM7, ARM9 (PXA255, 270), CSR8670, ATMEL SAM4S
Programming:	Visual Basic, C, C#, JAVA, .Net, SQLite
Web Applications:	HTML, Java Script, Spring Framework
Operating Systems:	Contiki, FreeRTOS, Window CE, Windows, Mac OS X
Mobile Applications:	Window Mobile, Android, Android Wear
Software	MATLAB, OrCad, Eagle, Visual Studio 200x, Eclipse, Android Studio, OSGi, ICCV7, Keil C51

RELATED PROJECTS

Projects that I participate(d) in will be described at my personal web page.

<http://www.jungwook.com>