

Insu Jang

CONTACT INFORMATION	KAIST, 291 Daehak-ro, Yuseong-gu Daejeon, Republic of Korea 34141	+82-10-2578-8375 insujang@calab.kaist.ac.kr
RESEARCH INTERESTS	Computer architecture, high performance computing, cloud computing, memory systems, hardware security	
EDUCATION	Korea Advanced Institute of Science and Technology (KAIST) Daejeon, Republic of Korea M.S., Computer Science, <i>Expected:</i> Feb 2018 (GPA: 3.99 / 4.3) Advisor: Jaehyuk Huh, Ph.D. Sungkyunkwan University , Suwon, Republic of Korea B.S., Computer Science, Feb 2016 (GPA: 4.24 / 4.5)	
RESEARCH EXPERIENCE	Research Assistant School of Computing, KAIST Topic: Hardware assisted security Undergraduate Research Assistant College of Software, Sungkyunkwan University Topic: Wireless data communication through inaudible sound	Mar 2016 to present May 2014 to Jul 2015
TEACHING EXPERIENCE	Teaching Assistant CS230 – System Programming Instructor: Jaehyuk Huh, Ph.D. School of Computing, KAIST	Fall 2016
EXTRA ACADEMIC ACTIVITIES	Vice Representative School of Computing, KAIST, Daejeon, Republic of Korea Research Intern Electronics and Telecommunications Research Institute (ETRI) Daejeon, Republic of Korea Research Intern Advanced Institutes of Convergence Technology (AICT) Suwon, Republic of Korea Purdue/NIPA Capstone Project Purdue University, West Lafayette, IN, USA Developer Member Samsung Software Membership, Suwon, Republic of Korea	May 2016 – Aug 2016 Jan 2016 – Feb 2016 Jul 2015 – Aug 2015 Jul 2014 – Aug 2014 Jan 2013 – Apr 2014
HONORS AND AWARDS	National Scholarship , KAIST Korea National Scholarship for Science and Engineering , Korea Student Aid Foundation Excellence Award , 2015 Convergence App Contest, Sungkyunkwan University Dean's List Award , Sungkyunkwan University	2016 – present 2014 – 2015 Dec 2015 Apr 2015

Dean's List Award, Sungkyunkwan University Oct 2014

Grand Prize, 2013 Smart TV App and Peripherals Contest, Korea Ministry of Trade, Industry, and Energy Nov 2013

Grand Prize, 2013 Mobile E-learning App Idea Contest, Korea Ministry of Education Sep 2013

PROJECTS

RTSR: Real Time Video Super Resolution Spring 2017
 CS570 – Machine Learning
 Applied deep learning based Single Image Super Resolution (SISR) technique into videos.
[\[Report\]](#) [\[PPT\]](#)

HEAD: HardwarE Accelerated Deduplication Fall 2016
 CS710 – Topics in Computing Acceleration with FPGA
 Implemented Xilinx FPGA based implementation for file data deduplication.
[\[PPT\]](#) [\[Code\]](#)

SUNSHINE: Service for U to eNhance Self-management Helpfully and Intelligently from Now to forEver Spring 2016
 CS442 – Mobile Applications
 Proposed an intelligent way to control mobile app execution and Internet contents based on contents related factor analysis.
[\[Report\]](#)

CSMA/CN: Collision Notification for 802.11 WLAN with BLE Spring 2016
 CS546 – Wireless Mobile Internet
 Proposed a way to notify a collision from a router to clients with Bluetooth Low Energy (BLE).
[\[Proposal\]](#) [\[Code\]](#)

Energy Aware Real-time Scheduling Algorithm on ARM big.LITTLE HMP Architecture Fall 2015
 ECE5756 – Real Time Systems Special Topics
 Proposed an algorithm to reduce power consumption while keeping real-time constraints.
[\[Report\]](#)

My Summary Note: Automatic Note Summary Application Fall 2015
 ICE3037 – Design Capstone Project
 Awarded an excellence prize in 2015 Convergence App Contest
 Proposed an automatic way of user's summaries in PDFs with Android tablet.
[\[Report \(Korean\)\]](#) [\[PPT \(Korean\)\]](#)

Data Transmission with Inaudible Sound Jul 2014 – May 2015
 A research project as an undergraduate research assistant
 Proposed a short-distance data transmission mechanism between microphones and speakers embedded in off-the-shelf smartphones.

MoleRush: Smart TV - Android Interactive Game Sep 2013
 A project in Samsung Software Membership
 Awarded a grand prize in 2013 Smart TV App and Peripherals Contest
 Designed a game using smartphones as controllers, and a smart TV as a display board.
[\[Playmovie \(Korean\)\]](#)

SKILLS

Languages
 C, C++, Java, Python, Vivado HLS

Software Frameworks

Virtualization: KVM, QEMU
Database: MySQL, MongoDB
FPGA: Vivado, Vivado HLS, Petalinux
GPU: CUDA
Security: SGX

Documentation Tools

L^AT_EX, matplotlib, OmniGraffle

REFERENCES

Jaehyuk Huh

Associate Professor

School of Computing, KAIST

e-mail: jhuh@kaist.ac.kr

[CV last updated on Aug 23, 2017]