

Younghun Lee

ELECTRONICS ENGINEER · HARDWARE

IT1-724, 80 Daehak-ro, Buk-gu, School of Electronics Engineering, Kyungpook National University(KNU), Daegu, South Korea, 702-701
☎ (+82) 10-5455-0427 | ✉ redson0517@gmail.com, yonghun.lee@knu.ac.kr@knu.ac.kr | 🌐 <https://sites.google.com/view/yonghun>

Bio Sketch

Mr. Lee received his B.S. Degree in Electronics Engineering at Jeonbuk National University, Jeonju, Korea in 2004. He was a research engineer at Samsung Electronics over 16 years from 2004 to 2020. He has worked on high-speed intra-panel interface and touch sensor controller. Since 2014, He is currently working as a Research Fellow since 2023 in Gaonchips which is a design solution partner of Samsung Foundry and a design partner of Arm. Also, I am now an Ph.D. student in School of Electronics Engineering at Kyungpook National University, Daegu, Republic of Korea. His research interests include high-performance acceleration with user behavior-based learning edge system. His research was focused on designing energy-efficient 1-D CNN Accelerator in VLSI chip level having application specific instructions which efficiently process array manipulation. He is pursuing toward obtaining his Ph.D. degree in KNU. He published several journal/conference papers in system and hardware architecture.

Education

Jeonbuk National University

B.S. IN ELECTRONICS ENGINEERING

Jeonju, S.Korea

Mar. 1997 – Feb. 2004

Kyungpook National University

INTEGRATED PH.D. IN ELECTRONICS ENGINEERING

Daegu, S.Korea

Mar. 2022 – Present

Skills

Programming C/C++, LaTeX, Verilog

Languages Korean, English

Experience

Gaonchips

RESEARCH FELLOW

- Project leader for Automotive AI informative IC

Seoul, S.Korea

Sep. 2023 – PRESENT

AI Hardware Center, Seoul National University

RESEARCH ENGINEER

- MPPT(Maximum Power Point Tracking) Optimizer Design for PV Panel

Seoul, S.Korea

Sep. 2021 – Nov. 2022

ABOV Semiconductor

PRINCIPAL ENGINEER

- Design MCU for phone PD(Power Delivery @USB)

Seoul, S.Korea

May. 2020 – Aug. 2021

Samsung Electronics

SENIOR ENGINEER

- Design Touch Sensor Controller IC for mobile phone from Mar. 2015 to Jun. 2020
- Design TV TCON(Timing Controller) SOC from Mar. 2010 to Dec. 2015
- Design DDI(Display Driver IC) from Jan. 2004 to Feb. 2008

Gyeonggi province, S.Korea

Mar. 2018 – Jun. 2019

Extracurricular Activity

AI-SoC (AI-Embedded System-Software-on-Chip Platform) LAB

S.Korea

MEMBER

Mar. 2022 - PRESENT

- Gained fundamental knowledge in MCU Embedded design
- Write several paper about Simulation Acceleration

Publications

INTERNATIONAL JOURNAL PAPER

Electromagnetic Interference (EMI) Suppression in an Intra-Panel Interface with Periodic Clock-Embedded Signaling Scheme

Kil-Hoon Lee, Dong Hoon Baek, Dongmyung Lee, Hansu Pae, Sang Min Lee, Young Min Choi, Young Hun Lee, Sun Ik Lee, Woo Sung Lee, Dae Joon Lee, Jae-Youl Lee, Lee Myunghee

Journal of the Society for Information Display, pp. 1223–1226. 2012

The Enhanced Reduced Voltage Differential Signaling eRVDS Interface with Clock Embedded Scheme for ChipOn-Glass TFTLCD Applications

Dong Hoon Baek, Jung Pil Lim, Han Su Pae, Jae Youl Lee, Wang Yu, Young Min Choi, Young Hun Lee, Sun Ik Lee, Woo Sung Lee, Dae Joon Lee, Yoon Kyung Choi, Lee Myung Hee

Journal of the Society for Information Display, pp. 70–73. 2010

A 400Mbps/ch SiDP Receiver for Mobile TFT-LCD Driver IC

Jae-Youl Lee, YoungHun Lee, Kyung-suc Nah, GyeSoo Goo, Jongseon Kim, Myunghee Lee, JinTae Kim

Journal of the Society for Information Display, pp. 1499–1501. 2006

DOMESTIC JOURNAL PAPER (KCI)

Fast Verilog Simulation using Tcl-based Verification Code Generation for Dynamically Reloading from Pre-Simulation Snapshot

Yonghun Lee, Daejin Park

Journal of the Korea Institute of Information and Communication Engineering (JKIICE), vol. 27, no. 4, pp. 545–551. The Korea Institute of Information and Commucation Engineering, 2023

INTERNATIONAL CONFERENCE

Fast Verilog Simulation using Tcl-based Verification Code Generation for Dynamically Reloading from Pre-Simulation Snapshot

Yonghun Lee, Daejin Park

International Conference on Artificial Intelligence in Information and Communication. 2023

A noise-immune stylus analog front-end using adjustable frequency modulation and linear-interpolating data reconstruction for both electrically coupled resonance and active styluses

Kyung-Hoon Lee, Sang-Pil Nam, Jung-Ho Lee, Michael Choi, Hyung-Jong Ko, San-Ho Byun, Jin-Chul Lee, Yong-Hoon, Yeong-Cheol Rhee, Yoon-Kyung Choi, Byung-Hoon Kang

IEEE International Solid-State Circuits Conference, pp. 184–186. 2018

An integrated LDI with readout function for touch-sensor-embedded display panels

Yoon-Kyung Choi, Hyoung Rae Kim, Wongab Jung, MinSoo Cho, Zhong-Yuan Wu, HyoSun Kim, YoungHun Lee, KyungMyun Kim, Kyu-Sam Lee, JongSeon Kim, Myunghee Lee

IEEE International Solid-State Circuits Conference, pp. 134–135. 2007

A 16.7 M Color VGA Display Driver IC with Partial Graphic RAM and 500Mb/s/ch Serial Interface for Mobile a-Si TFT-LCDs

Kyung-suc Nah, Hyeokchul Kwon, Jae-Youl Lee, Dukmin Lee, Jun-Seok Han, Young-Hun Lee, Hyeeyeong Rho, Jongseon Kim, Bongnam Kim, Myunghee Lee

IEEE International Solid-State Circuits Conference, pp. 140–592. 2007