

Jimin Yoo

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EDUCATION

- 2023 – Present Master of Science Candidate in Electronic Engineering
Seoul National University of Science and Technology, Seoul, South Korea
- 2019 – 2023 Bachelor of Science in Electronic and IT media Engineering
Seoul National University of Science and Technology, Seoul, South Korea

RESEARCH EXPERIENCES

Research Assistant, Dept of Electronic Engineering, Seoul National University of Science and Technology.

Advisor: Jae-Won Nam (2022 ~ Present)

- Built In Self Test(BIST) on PUF systems.
- Detection system of Side-Channel Attacks(SCA) on PUF systems.
- Bit Error Rate analysis of PUF systems.
- DC-DC Converter PCB module evaluation.

Tape-out

- 2023.05. TSMC 180nm BCD, SRAM based PUF circuits ($1.0 \times 1.1 \text{ mm}^2$).
- 2023.11. Samsung 28nm FD-SOI, SRAM based PUF with SCA detection system and BIST algorithm ($0.49 \times 0.36 \text{ mm}^2$)
- 2024.02. Samsung 28nm LPP, SRAM based PUF with SCA detection system and BIST algorithm ($0.59 \times 0.46 \text{ mm}^2$)

HONORS / AWARDS

- Dean's Awards (Best Capstone 2022 Award Winners), Seoul National University of Science and Technology, College of Information and Communication, 2023.
- Magna cum Laude from Seoul National University of Science and Technology, 2023.

LIST OF PUBLICATIONS

- **J. Yoo**, J.-W. Nam, J.-P. Hong, "Study on discard-rate of SRAM-based PUF," *Summer annual Conf. of IEIE*, Jeju, Jun. 2022.
- H.-J. Lee, H.-C. Lee, **J. Yoo**, Y.-K. Cho, J.-W. Nam, "Analysis on Efficiency of DC-DC Converter through Power-Loss Modeling & Measurement," *the 5th ISE Conf.*, Seoul, Dec. 2022.

- H.-C. Lee, H.-J. Lee, **J. Yoo**, J.-W. Nam, “Analysis on Efficiency of DC-DC Converter through Power-Loss Modeling & Measurement,” *Summer annual Conf. of IEIE*, Jeju, Jun. 2022.

PATENT

- **J. Yoo**. Building a exposure system and scrambling algorithm for detection of side channel attack to PUF based on silicon integrated circuit

TEACHING EXPERIENCE

Teaching Assistant, Dept. of Electronic Engineering, Seoultech.

- Electronic Circuit, Fall 2021 and Spring 2023.
- Integrated Circuit Design, Spring 2022.

TRAINING ACTIVITIES

- 2023.05.15-05.19, [IDEC Researcher Education] Cell-Based Chip Design Flow Education
- 2023.02.12-02.17, Advanced Semiconductor Design (VCO)
- 2023.02.08-02.10, PCB Artwork by OrCAD PCB Editor
- 2023.02.06-02.07, Using Linux and Command-line
- 2022.01.25-01.26, Virtuoso ADE Explorer and Assembler
- 2021.07.14-07.15, Fundamentals of Integrated Circuit Design