2021-2022 Opening Notice

Gyungsu Byun ICS Lab INHA UNIVERSITY

Department of Electronic and Computer Engineering (ECE), Inha University, Incheon, South Korea

(Home) http://mics.inha.ac.kr/   (University) http://www.inha.ac.kr

(Email:) gsbyun@inha.ac.kr

- **Multiple GRA positions**

    If you're interested in our research, please see Prof. Byun's research web-page (http://mics.inha.ac.kr) and send your elaborated resume and contact him. The strongest candidate will have below knowledge.

    o   Must: 1) Circuit theory 2) electric circuit 3) analog/digital circuit design experience

    o   Must: analog and digital electric circuit design tool knowledge (SPICE, Cadence, SoC, Verilog, C++)

    o   Analog IC design and RF-IC design knowledge (Wireless Transceiver)

    o   Digital system designs: Arduino/Micro-bit programming (FPGA, MCU) and Python (or C/C++)

- **Key research projects**

    o   Smart Artificial Intelligent (AI) electronics (coding-based smart IC and system design for future mobile smart communication and computing electronics)

    o   Ultra-low-power compact neural-synaptic communication IC and system design

    o   High-performance memory/CPU interface for high-computing systems

    o   Intelligent RF communication systems.

    o   Smart healthcare system (biosensing + AI + IoT).

    o   Advanced driver-assistance systems (ADAS) (Deep learning + Wireless communication + Smart sensing).

    o   Autonomous vehicle system (self-driving car) (6G + AI).

- **Key documents**

    Please send the following credentials (gsbyun@inha.ac.kr)

    o   Resume (including your BS/MS research project experiences)

    o   Scanned BS/MS transcripts (for PhD, or MS-PhD combined)

    o   Scanned English score (> TOEIC 700, IELTS 5.5, NEW TEPS 327, TOEFL IBT 71 above)

- **Key benefits**

    o   (Tuition) Your MS/PhD tuition are fully covered

    o   (Salary) Your monthly competitive salary will be supported during PhD

    -   For PhD: Monthly (KRW 1,600,000 per month for PhD)

    -   For MS-PhD: (KRW 1,100,000 in first 2 years MS, then KRW 1,600,000 for PhD).

2021-2022 Opening Notice

- o (Other benefits)
    - Opportunities to attend international conferences oversea paid by research funding
- o (Incentive)
    - During PhD, additional incentive will be given when outstanding performance (paper publications)

- **PhD requirement**
    - o (Papers)
        - for PhD, two papers such as IEEE JSSC, IEEE TCAS1 or IEEE TCAS2 or same as three IEEE Access papers during PhD (3 years)
        - for MS/PhD-combined, four IEEE Access papers during MS/PhD-combined. (4-4.5 years)

- **Contact Information**

    Gyungsu Byun, Ph.D

    Professor

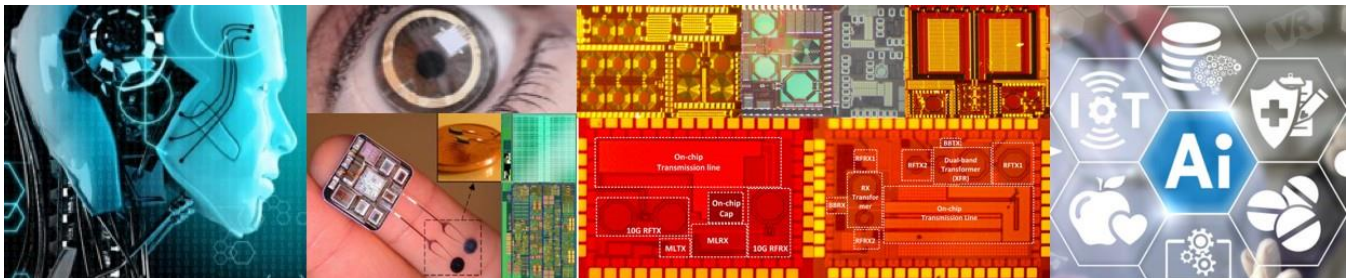   Department of Electronic and Computer Engineering (ECE)

    Inha University

Additional Information

About INHA university

- IU has vibrant environment for excellent learning and high living quality
- IU is also top 8 university in Korea among 244 universities (2017, 2018 Korea University Ranking)
- IU is also very close to international city (Songdo, 10-20min) and Seoul capital city (40-50min)
- IU has various international club for friendship, communities.

About ICS-Lab Key Research

In our lab and team member, we could analyze, design and verify transformative AI, smart IC and system design for high performance communication and computing systems.

- Smart Artificial Intelligent (AI) electronics (coding-based smart IC and system design for future mobile smart communication and computing electronics)
- Ultra-low-power compact neural-synaptic communication IC and system design
- High-performance memory/CPU interface for high-computing systems
- Intelligent wireless/wireline communication and computing systems.