Saidul Alam Chowdhury

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Dept. of Electrical Engineering
Incheon National University
South Korea

RESEARCH INTERESTS

Power electronics
- Wireless Power Transfer
- Electromagnetics
- Portable Devices, Electric Vehicle, Automatic Guided Vehicle

RF/analog circuit design
- Portable Devices
- Biomedical Applications

EDUCATION

Feb. 2024 (Exp.)	Ph.D.	**Incheon National University (INU)** in Electrical Engineering Advisor: Dr. Ahn Dukju
Aug. 2021	M.S.	**Incheon National University (INU)** in Electrical Engineering Advisor: Dr. Ahn Dukju
Nov. 2017	B.Sc.	**Chittagong University of Engineering and Technology (CUET)** in Electrical and Electronic Engineering

EXPERIENCES

Sept. 2019 – Present	**Incheon National University, Incheon, South Korea** Graduate Research Assistant Analog RF Power Circuit Lab
Jan. 2018 – Aug. 2019	**Pran-RFL Group, Dhaka, Bangladesh** Assistant Engineer

PUBLICATIONS

Journals

1. **Saidul Alam Chowdhury**; Seong-Min Kim; Sang-Won Kim; Jungick Moon; In-Kui Cho; Dukju Ahn, "Reducing/Increasing Tuning Capacitor for Frequency-Modulated Spread-Spectrum Inductive Power Transfer," ***IEEE Transactions on Power Electronics***, August 2023.
2. **Saidul Alam Chowdhury**; Seong-Min Kim; Sang-Won Kim; Jungick Moon; In-Kui Cho; Dukju Ahn, "Automatic Tuning Resonant Capacitor to Fix the Bidirectional Detuning With ZVS in Wireless Power Transfer," ***IEEE Transactions on Industrial Electronics***, July 2023.
3. **Saidul Alam Chowdhury**; Sang-Won Kim; Seong-Min Kim; Jungick Moon; In-Kui Cho; Dukju Ahn, "Automatic Tuning Receiver for Improved Efficiency and EMI Suppression in Spread-Spectrum Wireless Power Transfer," ***IEEE Transactions on Industrial Electronics***, March 2022.

Conferences

1. **Saidul Alam Chowdhury**; Dukju Ahn, "Self-Tuning LCC Receiver for Improved Efficiency and EMI Mitigation in Spread-Spectrum Wireless Power Transfer," *IEEE Wireless Power Technology Conference and Expo 2023 (WPTCE),* accepted for publication.
2. **Saidul Alam Chowdhury**; Dukju Ahn; Seong-Min Kim; Sang-Won Kim; Jungick Moon; In-Kui Cho, "Automatic Resonance Tuning Receiver for Spread-Spectrum EMI Suppression," *Korean Electrical Society Conference Proceedings, 2022.*
3. Dukju Ahn; **Saidul Alam Chowdhury**, "Resonant Inverter with Self-Calibration of Coil Inductance Detuning," *EAPPC & BEAMS 2022, Abstract No.A20220427-0719.*
4. **Saidul Alam Chowdhury**; Om Prakash Bose; Quazi Delwar Hossain, "Design of a Two Stage CMOS Operational Amplifier in 100nm Technology with Low Offset Voltage," *2018 International Conference on Innovations in Science, Engineering and Technology (ICISET)*.

PROJECT EXPERIENCE

- **At Incheon National University**

LSK Vibration Reduction for Galaxy Smartphone and Smartwatch
- Samsung Electronics

Free Positioning Wireless Charger for Galaxy Watch and Galaxy Note 10
- Samsung Electronics

- **At Electronics and Telecommunications Research Institute (ETRI)**

3.3 KW Spread-Spectrum demonstration for wireless charger
- National Research Council

SKILLS

Software	LTspice, PSIM, ADS, Diptrace, Code Composer Studio, Ansys Maxwell-3D, Matlab, Microsoft Visio
HARDWARE	Power converters, PID controller, PCB fabrication, Switching devices, Microcontroller, Sensors, Coil fabrication, Measurement instruments: EHP-200A EMF Analyzer, Vector Network Analyzer, Digital LCR meter, Oscilloscope

AWARDS & SCHOLARSHIPS

Sep. 2021	Full Scholarship for Ph.D., Incheon National University
Sep. 2019	Full Scholarship for masters, Incheon National University

REFERENCES

Professor **Ahn Dukju** (Ph.D. Advisor)
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