Yeonho Jeong

Assistant Professor, University of Rhode Island
The Department of Electrical, Computer, and Biomedical Engineering
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EDUCATION

- Ph.D. in Electrical Engineering, **KAIST**, 2018
  - Dissertation: Study on a Soft Switching Method for High-Efficiency Bridgeless Power Factor Correction Rectifier
  - Advisor: Dr. Gun-Woo Moon

PROFESSIONAL ACADEMIC/INDUSTRIAL EXPERIENCE

- Assistant Professor, **University of Rhode Island**, RI, USA, 2020 − Present
- Postdoctoral Fellow, **University of Colorado Denver**, CO, USA, 2018 − 2020
- Senior Research Engineer, **Solu-M**, South Korea, 2015 − 2018
- Research Engineer, **Samsung Electro-Mechanics**, South Korea, 2008 – 2015

HONORS AND AWARDS

- **Best Paper Award, *IEEE Transportation Electrification Conference*, 2016**

JOURNAL PUBLICATIONS

Undergraduate and graduate student/post-doc/visiting scholar advised

[1] K. W. Kim, M. Y. Kim, J. I. Kang, and **Y. Jeong**, "High-Efficiency Multi-Output LLC Resonant

Converter with Multi-Winding Transformer and Cost-Effective Analog Control Circuit," *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, Early Access.

[2] ***Y. G. Kwak***, **Y. Jeong**, and B. H. Lee, "Port Configuration Method of Three-Switch Converter for High-voltage Gain in Hybrid UAVs Applications," *Journal of Electrical Engineering & Technology*, Early Access.

[3] B. Babaiahgari, **Y Jeong**, and J. D. Park, "Dynamic Control of Region of Attraction using Variable Inductor for Stabilizing DC Microgrids with Constant Power Loads," *IEEE Trans. Ind. Electron*., vol. 68, no. 10, pp. 10218-10228, Oct. 2021.

[4] K. W. Kim, **Y. Jeong**, J. S. Kim, and G. W. Moon, "Low Common Mode Noise Full-Bridge LLC Resonant Converter with Balanced Resonant Tank," *IEEE Trans. Power Electron*., vol. 36, no. 4, Apr. 2021.

[5] K. W. Kim, **Y. Jeong**, J. S. Kim, and G. W. Moon, "Low Common-Mode Noise LLC Resonant Converter with Static-Point-Connected Transformer," *IEEE Trans. Power Electron*., vol. 36, no. 1, Jan. 2021.

[6] **Y. Jeong**, M. S. Lee, J. D. Park, J. K. Kim, and Ronal A. L. Rorrer, "Hold-up Time Compensation Circuit of Half-Bridge LLC Resonant Converter for High Light-load Efficiency," *IEEE Trans. Power Electron*., vol. 35, no. 12, pp. 13126-13135, Dec. 2020.

[7] M. H. Park, **Y. Jeong**, R. A. L. Rorrer, D. Choi, and G. W. Moon, "Hold-up Time Extension Method for LLC Resonant Converter by Detecting Operation Region," *IEEE Trans. Power Electron*., vol. 35, no. 10, pp. 9949-9952, Oct. 2020.

[8] **Y. Jeong**, M. H. Park, and G. W. Moon, "High Efficiency Zero-Voltage-Switching Totem-pole Bridgeless Rectifier with Integrated Inrush Current Limiter Circuit," *IEEE Trans. Ind. Electron*. vol. 67, no. 9, pp. 7421-7429, Sep. 2020.

[9] C. Y. Lim, **Y. Jeong**, and G. W. Moon, "Half-Bridge Integrated Phase-Shifted Full-Bridge Converter With High Efficiency Using Center-Tapped Clamp Circuit for Battery Charging Systems in Electric Vehicles," *IEEE Trans. Power Electron*. vol. 35, no. 5, pp. 4934-4945, May. 2020.

[10] **Y. Jeong**, J. D. Park, and G. W. Moon, "An Interleaved Active-Clamp Forward Converter Modified for Reduced Primary Conduction Loss without Additional Components," *IEEE Trans. Power Electron*., vol. 35, no. 1, pp. 121-130, Jan. 2020.

[11] M. H. Park, J. I. Baek, **Y. Jeong**, and G. W. Moon, "An Interleaved Totem-pole Bridgeless Boost PFC Converter with Soft-Switching Capability Adopting Phase-Shifting Control," *IEEE Trans. Power Electron*., vol. 34, no. 11, pp. 10610-10618, Nov. 2019.

[12] C. Y. Lim, **Y. Jeong**, and G. W. Moon, "Phase-Shifted Full-Bridge DC-DC Converter With High

Efficiency and High Power Density Using Center-Tapped Clamp Circuit for Battery Charging in Electric Vehicles," *IEEE Trans. Power Electron.*, vol. 34, no. 11, pp. 10945-10959, Nov. 2019.

[13] K. W. Kim, H. S. Youn, J. I. Baek, **Y. Jeong**, and G. W. Moon, "Analysis on Synchronous Rectifier Control to Improve Regulation Capability of High-Frequency LLC Resonant Converter," *IEEE Trans. Power Electron.*, vol. 33, no. 8, pp. 7252-7259, Aug. 2018.

[14] **Y. Jeong**, J. K. Kim, and G. W. Moon, "A Bridgeless Dual Boost Rectifier With Soft-Switching Capability and Minimized Additional Conduction Loss," *IEEE Trans. Ind. Electron.*, vol. 65, no. 3, pp. 2226-2233, Mar. 2018.

[15] **Y. Jeong**, J. K. Kim, J. B. Lee, and G. W. Moon, "An Asymmetric Half-bridge Resonant Converter Having a Reduced Conduction Loss for DC/DC Power Applications With a Wide Range of Low Input Voltage," *IEEE Trans. Power Electron.*, vol. 32, no. 10, pp. 7795-7804, Oct. 2017.

CONFERENCE PUBLICATIONS

Undergraduate and graduate students/post-docs/visiting scholars advised.

[1] Zhenyu Xu, Miaoxiang Yu, Qing Yang, **Y. Jeong**, Jillian Cai and Tao Wei, "A Novel FPGA-Based Circuit Simulator for Accelerating Reinforcement Learning-Based Design of Power Converters," in *proc. 34th IEEE International Conference on Application-specific Systems, Architectures and Processors (ASAP)*, 2023 – **Best Paper Award**.

[2] Z. Xu, M. Yu, Q. Yang, **Y. Jeong**, J. Cai and T. Wei, "A Novel FPGA-Based Circuit Simulator for Accelerating Reinforcement Learning-Based Design of Power Converters," *in proc*. 2023 IEEE 34th International Conference on Application-specific Systems, Architectures and Processors (ASAP), Accepted./

[3] ***S. Thurber***, J. Baek, and **Y. Jeong**, "An Auxiliary Circuit with a Flexible LC Resonant Tank for High-Efficiency and Low-Cost Totem-Pole Boost Bridgeless Power-Factor Correction Converter," in *Proc. IEEE Applied Power Electronics Conference and Exposition (APEC)*, 2023.

[4] ***X. Zhang***, R. A. L. Rorrer, and **Y. Jeong**, "A Novel Digital Energy Management Control Strategy of a Fully Active Hybrid Converter for Unmanned Aerial Vehicle Applications," in *Proc. IEEE Applied Power Electronics Conference and Exposition (APEC)*, 2023.

[5] Z. Xu, M. Yu, Q. Yang, **Y. Jeong**, and T. Wei, "A Novel FPGA Simulator Accelerating Reinforcement Learning-Based Design of Power Converters," *Proceedings of the 2023 ACM/SIGDA International Symposium on Field Programmable Gate Arrays*, 2023.

[6] Z. Xu, ***X. Zhang***, T. Wei, K. W. Kim and **Y. Jeong**, "An FPGA-based Power Converter Simulation Accelerator Towards Highly Time-Efficient Machine Learning-Aided Design Methodology," *IEEE Energy Conversion Congress & Exposition (ECCE)*, 2022.

[7] J. Y. Kim, **Y. Jeong** and J. K. Kim, "Double-Voltage Charger for On-Board Charger With 800 V Battery," *The ICT-Future Vehicle session at ICNGC 2022*, 2022.

[8] ***X. Zhang***, K. W. Kim, and **Y. Jeong**, "Low Cost and Small Component Count Hybrid Converter with Energy Management Control for Unmanned Aerial Vehicle Applications," in *Proc. IEEE Applied Power Electronics Conference and Exposition (APEC)*, 2022.

[9] K. W. Kim, **Y. Jeong**, M. Y. Kim, and J. I. Kang, "High Efficiency Dual-Output LLC Resonant Converter with Synchronous Rectifier Control," in *Proc. IEEE Applied Power Electronics Conference and Exposition (APEC)*, 2022.

[10] J. S. Choi, ***N. Lee***, Y. -J. Cheon, S. W. Cho, H. -W. Kim, J. Koo, J. Choi, **Y. Jeong**, and T. Chung, "A Flat Architectural Wall Approach to Electrical Integration and Test for GK2A and GK2B," in *Proc. IEEE Aerospace Conference*, 2022.

[11] S. H. Lee, **Y. Jeong**, and J. K. Kim, "Integrated DC/DC converter for Reducing Voltage Stress and DC Offset Current of Transformer," in *Proc. ICT-Future Vehicle Workshop 2021*, 2021.

[12] **Y. Jeong**, K. W. Kim, R. A. L. Rorrer, and J. D. Park, "A Novel Multi-Input and Single-Output DC/DC Converter for Small Unmanned Aerial Vehicle Applications," *in Proc. 2020 IEEE Applied Power Electronics Conference and Exposition (APEC)*, 2020, pp. 1302-1308.

[13] S. H. Ko, **Y. Jeong**, B. H. Lee, R. A. L. Rorrer, and J. D Park, "Asymmetric Dual Active Clamp Forward Converter with Phase-Shift Control for Small Conduction Loss," *in Proc. 2020 IEEE Applied Power Electronics Conference and Exposition (APEC)*, 2020, pp. 1866-1871.

[14] B. Babaiahgari, **Y. Jeong**, and J. D Park, "A Stability Enhancement Method for DC Microgrids with Constant Power Loads Using Variable Inductor," *in Proc. 2020 IEEE in Proc. Applied Power Electronics Conference and Exposition (APEC)*, 2020, pp. 2236-2240.

[15] M. H. Park, **Y. Jeong**, D. Choi, D. M. Kim, and G. W. Moon, "Hold-up Time Extension Method in LLC Converter by Detecting Operation Region," in *Proc. IEEE 9th International Power Electronics and Motion Control Conference (IPEMC2020-ECCE Asia)*, 2020, pp. 1706-1709.

[16] K. W. Kim, **Y. Jeong**, J. S. Kim, J. E. Park, and G. W. Moon, "Low Common-Mode Noise Structure Based on Half-Bridge LLC Converter for Medium and High Power Applications," in *Proc. IEEE 9th International Power Electronics and Motion Control Conference (IPEMC2020-ECCE Asia)*, 2020., pp. 640-643.

[17] M. S. Lee, C. Y. Lim, **Y. Jeong**, T. W. Kim, and G. W. Moon, "A High Efficiency Phase-Shift

Full-Bridge Converter with Improved Clamping Circuit to Eliminate Oscillation for EV Battery Charger," in *Proc. IEEE 9th International Power Electronics and Motion Control Conference (IPEMC2020-ECCE Asia)*, 2020, pp. 1696-1701.

[18] **Y. Jeong**, R. A. L. Rorrer, B. H. Lee, and J. D. Park, "A Novel Control Scheme for High Efficiency Fuel Cell Power Systems in Parallel Structure," *in Proc. 2019 IEEE Energy Conversion Congress & Exposition (ECCE)*, 2019, pp. 940-946.

[19] B. Babaiahgari, **Y. Jeong**, and J. D Park, "Stability Analysis for Power Management Between Standalone DC Microgrids with Constant Power Loads," *in Proc. 2019 IEEE Energy Conversion Congress & Exposition (ECCE)*, 2019, pp. 5778-5782.

[20] M. H. Ullah, **Y. Jeong**, and J. D. Park, "Multi Agent-based Distributed Energy Arbitrage in Residential Distribution System," *in Proc. 2019 IEEE Power and Energy Society General Meeting (PESGM)*, 2019, pp. 1-5.

[21] D. K. Kim, **Y. Jeong**, J. E. Park, N. Y. Lee, and G. W. Moon, "Boost-Forward Integrated Converter for High Power Density Spacecraft Applications," *in Proc. 2019 10th International Conference on Power Electronics and ECCE Asia*, 2019, pp. 1-6.

[22] M. H. Park, **Y. Jeong**, D. K. Kim, K. M. Kim, and G. W. Moon, "Pre-Regulating Boost Converter with Asymmetric Half-bridge LLC Converter for DC Server Power Supply," *in Proc. 2019 10th International Conference on Power Electronics and ECCE Asia*, 2019, pp. 1927-1932.

[23] C. Y. Lim, **Y. Jeong**, M. S. Lee, Y. D. Lee, and G. W. Moon, "High Efficient Hybrid Converter Using Center-tapped Clamp Circuit," *in Proc. 2019 10th International Conference on Power Electronics and ECCE Asia,* 2019, pp. 2067-2072.

[24] D. K. Kim, **Y. Jeong**, J. I. Baek, J. E. Park, C. W. Lim, G. W. Moon, "High Efficiency and High Power Density Weinberg Converter Reducing Conduction Loss and Output Current Ripple for Space Applications", *in Proc. Applied Power Electronics Conference and Exposition (APEC)*, 2019, 1583-1586.

[25] **Y. Jeong,** M. H. Park, K. W. Kim, B. H. Lee, and G. W. Moon, "High Voltage Gain Interleaved Active-Clamp Forward (IACF) Converter having Reduced Primary Conduction Loss," *in Proc. ECCE Asia,* 2018, pp. 838-844.

[26] K. W. Kim, J. I. Baek, **Y. Jeong,** K. M. Kim, and G. W. Moon, "Analysis for High-Frequency LLC Resonant Converter with Planar Transformer at Light-Load Condition," *in Proc. ECCE Asia,* 2018, pp. 2365-2369.

[27] C. Y. Lim, **Y. Jeong**, K. W. Kim, F. S. Kang, and G. W. Moon, "A High-Efficiency Power Supply from Magnetic Energy Harvesters," *in Proc. ECCE Asia,* 2018, pp. 2376-2379.

[28] **Y. Jeong,** J. K. Kim, and G. W. Moon, "Analysis on half-bridge LLC resonant converter by using variable inductance for high efficiency and power density server power supply," *in Proc. APEC,* 2017, pp. 170-177.

[29] **Y. Jeong,** J. S. Park, J. K. Kim, C. Y. Lim, M. H. Park, and G. W. Moon, "A zero-voltage-switching dual boost power factor correction rectifier with active clamp circuit having minimized conduction losses," *in Proc. ECCE Asia,* 2017, pp. 254-259.

[30] M. H. Park, C. O. Yeon, J. I. Baek, **Y. Jeong,** G. W. Moon, and J. S. Park, "An improved current compensation method for high PF and low THD in digital boost power factor corrector," *in Proc. ECCE Asia,* 2017, pp. 1065-1070.

[31] C. Y. Lim, **Y. Jeong,** and G. W. Moon, "Phase leading input capacitor compensation using variable inductor with high efficiency in a CRM boost PFC," *in Proc. ECCE Asia,* 2017, pp. 852-856.

[32] **Y. Jeong,** J. I. Baek, J. Choi, and G. W. Moon, "Half Bridge LLC Resonant Converter with High Voltage Gain for Single-Phase AC/DC Power System," *in Proc. ITEC Asia-Pacific,* 2016, pp. 573-578.

[33] D. K. Kim, **Y. Jeong,** C. Y. Lim, B. Kang, and G. W. Moon, "Bidirectional Bridgeless PFC with Reduced Input Current Distortion and Switching Loss Using Gate Skipping Technique," *in Proc. ITEC Asia-Pacific*, 2017, pp. 579-583 – **Best Paper Award**.

[34] **Y. Jeong,** J. B. Lee, C. O. Yeon, C. Y. Lim, J. K. Han, and G. W. Moon, "Asymmetric Half-Bridge Resonant Converter having a Reduced Conduction Loss for DC/DC Power Systems with a Low Input Voltage," *in Proc. ECCE Asia*, 2016, pp. 621-628.

[35] J. K. Han, J. I. Baek, C. E. Kim, **Y. Jeong,** C. O. Yeon, and G. W. Moon, "A simple THD improving method for CCM boost PFC converter under mixed conduction mode operation," *in Proc. ECCE Asia,* 2016, pp. 466-470.

[36] J. I. Baek, J. Choi, **Y. Jeong,** Y. Jang, G. W. Moon, and C. H. Yu, "Asymmetrical Half-Bridge Converter with Reduced DC-offset current in Transformer," *in Proc. ECCE Asia,* 2016, pp. 2249-2253.

[37] C. Y. Lim, J. H. Kim, **Y. Jeong,** D. K. Kim, H. S. Youn, and G. W. Moon, "A High Efficiency Critical Mode Boost PFC Using a Variable Inductor," in *Proc. ECCE Asia,* 2016, pp. 2792-2797.

[38] S. W. Jwa, J. B. Lee, **Y. Jeong,** K. W. Kim, G. W. Moon, and J. H. Kim, "Active Clamped Current-Fed Full-Bridge Integrating LLC Converter with Low Current and Voltage Stress," *in Proc. ECCE Asia,* 2016, pp. 3211-3217.

[39] J. -W. Kim, J. -P. Moon, H. -S. Youn, **Y. Jeong**, and G. -W. Moon, "Phase Leading Input Current Compensation in Digitally Controlled CRitical Mode Boost PFC," *in Proc. ECCE Asia*, 2015, pp. 2688-2695.

[40] **Y. Jeong**, J. W. Kim, C. Y. Lim, D. K. Kim, J.I. Baek, and G. W. Moon, "A Strategic Control Scheme of Phase-Shift Full Bridge Converter for Improving Light-load Efficiency in Server Power System," *in Proc. ECCE Asia, 2015*, pp. 488-494.

[41] D. K. Kim, C. O. Yeon, J. H. Kim, **Y. Jeong,** and G. W. Moon, "LLC Resonant Converter with High Voltage Gain Using Auxiliary LC Resonant Circuit," *in Proc. ECCE Asia,* 2015, pp. 1505-

1512.

[42] **Y. Jeong**, C. E. Kim, S. Y. Cho, D. Y. Kim, and G. W. Moon, "Unexpected Bi-Directional Operation of Phase-Shift Full-Bridge Converter in Parallel Operation System," *in Proc. ECCE Asia*, 2013, pp. 999-1004.

PATENTS

U.S. Patents

[1] J. N. Lee and **Y. Jeong**, POWER SUPPLY APPARATUS, US.9263953.B2, 2016

Korean Patents

[1] S. H. Won, D. M. Jang, B. J. Choi, J. W. Kim, **Y. Jeong**, T. W. Heo, D. J. Park, J. K. Lee, D. S. Kim, and D. J. Kim, SERIAL COMMUNICATION APPARATUS, 1012876740000, 2013. **(Registered)**

[2] B. J. Choi, D. M. Jang, J. W. Kim, **Y. Jeong**, T. W. Heo, S. H. Won, J. P. Kim, J. K. Lee, D. S. Kim, and D. J. Kim, MEASURING ROTATION SPEED OF FAN USINGING COUNTER, 1012737500000, 2013. **(Registered)**

[3] **Y. Jeong**, C. E. Kim, J. P. Kim, and D. S. Kim, POWER SUPPLY WITH IMPROVED SYSTEM EFFICIENCY, 1011414160000, 2012. **(Registered)**

[4] D. M. Jang, B. J. Choi, J. W. Kim, **Y. Jeong**, T. W. Heo, S. H. Won, J. P. Kim, J. K. Lee, D. S. Kim, and D. J. Kim, MONITORING APPARATUS OF POWER, 1011385900000, 2012. **(Registered)**

[5] D. J. Kim, Y. Jeong, and D. S. Kim, POWER SUPPLY APPARATUS USING DUAL FEEDBACK CONTROL, 1012190010000, 2012. (**Extinguishment**)

INVITED SEMINARS/PRESENTATIONS

[1] "Future of Mobility," [Panelist] Future Science and Technology Session, *The 1st World Congress of Korean Scientists and Engineers*, Seoul, South Korea, July 5th, 2023.

[2] "Time-Efficient Machine Learning-aided Electric Design Automation for Power

Conversion Systems Enabled by FPGA Accelerators: A Fast Power Converter Auto Designer,"

Korea National University of Transportation, Chungju, South Korea, May 2023

Jeonbuk National University, Jeonju, South Korea, May 2023

Ajou University, Suwon, South Korea, July 2023

[3] "High-Efficiency Topologies for Industrial Applications in Power Electronics,"

University of Rhode Island, RI, USA, Feb. 2020

University of Michigan Dearborn, MI, USA, Feb. 2020

Manhattan College, NY, USA, Feb. 2020

[4] "Introduction of Power Electronics and Server Power Systems," presented at CEAS Seminar Series at *University of Colorado Denver*, Denver, CO, Oct 2018

[5] "State of the art for Server Power Systems," presented at *Myung-ji University*, South Korea, Aug 2018

ACADEMIC/INDUSTRIAL PROJECTS

- **United States Geological Survey**, PI, "Toward High Reliability: Novel Power Conversion System and Power Management Control for Water Monitoring Stations," 2024-, $248,395 **(Awarded)**.
- **NDEP/NIUVT: Undergraduate Research Assistant Fundings (2022-Present)**
  Recipients: Alex Amado (2023-), Zach Chofay (2022-2023), Edgar Ponce (2022-2023), Gianni Smith (2022)
- **DARPA Subterranean (SubT) Challenge, Team MARBLE (CU Denver), 2018-2019**
- **Solu-M, AC/DC server power systems with 800 W, 1.6 kW, and 2.0 kW, 2015-2018**
- **Samsung Electro-Mechanics, AC/DC and DC/DC server/network power systems with 300 W, 450 W, 700 W, 750 W, 1.6 kW, and 2.0 kW, 2008-2015**

STUDENT ADVISING

- **Graduate Students:** Xueshen Zhang (2021~), Shaun Thurber (2022~), Edgar Ponce (2023~)
- **Current Undergraduate Students:** Steven Kowalewski (2022~), Alex Amado (2023~), Gianni Smith (2022~), and Abby Tadamala (2023~)
- **Graduated Students:** Edgar Ponce (2023), Zach Chofay (2023), Shaun Thurber (2022), Christopher Charron (2022), and Nataly Karnaukh (2022).
- **Advisor of Undergrad Student Group:**
  URI Formula SAE Club (2021~)
  URI International Future Energy Challenge (IFEC) Team (2022~)

STUDENT AWARDS

- **Undergraduate Research Grants**, Office of Undergraduate Research and Innovation.
  Nathan Mendoza, Liam Crisfield, Jack Petrarca, "*Telemetry and Control System for URI's First Formula SAE Style Car*," 2023, $1,400.
  Nicholas Costick, Edgar Ponce Baldelamar, Zachary Chofay, "Funding Proposal for IFEC 2023: Solid State Transformer (SST) Project," 2022, $1,336.
- **Shaun Thurber, 1st Place, Outstanding Teaching Assistant Award, 2023.**
- **Xueshen Zhang, 2nd Place, Outstanding Research Assistant Award, 2023.**
- **Xueshen Zhang, APEC Student Travel Support**, 2022, $1,000.

TEACHING

- **Spring 2023, ELE 322** – *Electromagnetics I*
- **Fall 2021-2022, ELE 446** – *Introduction to Power Electronics*
- **Spring 2021-2022, ELE 343** – *Electronics II*

ACADEMIC SERVICES

- *Member, Electrical Engineering Technician Search Committee, 2021*
- *Member, Electrical Engineering Tenure-Track Faculty Search Committee, 2023*

PROFESSIONAL SERVICE

- **Technical Program Committee Chair/Member**
  - *Technical Session Chair, IEEE Applied Power Electronics Conference, 2022-2023.*
  - *Topic Chair, IEEE Energy Conversion Congress and Exposition, 2022-2024.*
  - *Technical Session Chair, ICPE 2023 – ECCE Asia Conference, 2023.*
- **Panel Reviewer**
  - *National Science Foundation (NSF)*
- **Paper Reviewer**
  - *IEEE Transactions on Industrial Electronics*
  - *IEEE Transactions on Power Electronics*
  - *IEEE Transactions on Energy Conversion*
  - *IEEE Transactions on Industry Applications*
  - *IEEE Transactions on Transportation Electrification*
  - *IEEE Journal of Emerging and Selected Topics in Power Electronics*
  - *IEEE Access*
  - *KIPE Journal of Power Electronics*
  - *MDPI Energies — Open Access Journal*
  - *IEEE Applied Power Electronics Conference (APEC)*
  - *IEEE Energy Conversion Congress and Exposition*
  - *IEEE Energy Conversion Congress and Exposition Asia*
  - *IEEE Wireless Power Transfer Conference*
  - *AIAA Propulsion & Energy Forum*
- **Technical Consultant**

- *Korea Railroad Research Institute*, Aug. 2018

- **Professional Society Memberships**

- *Member, IEEE (Institute of Electrical and Electronics Engineers)*
- *Member, SAE International (The Society of Automotive Engineers)*
- *Member, KIPE (The Korean Institution of Power Electronics)*
- *Member, KSEA (Korean-American Scientists and Engineers Association)*