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Education-----

Seoul National University	Seoul Korea
Ph. D. in electrical engineering	Aug. 2007
Doctoral dissertation: "Statistical channel estimation for OFDM systems over fading channels"	
Seoul National University	Seoul Korea
B.S. in electrical engineering	Feb. 2001

Professional Experience-----

Myongji University, Professor,	Mar. 2020~ Present
Myongji University, Associate Professor,	Mar. 2015~ Feb.2020
Myongji University, Assistant Professor,	Mar. 2013~Feb.2015
Mokpo National Maritime University, Assistant Professor,	Mar. 2011-Feb.2013
Korea Electrotechnology Research Institute (KERI), Senior Researcher,	Aug. 2007 - Feb. 2011

Publications (Journal papers)-----

51. J. Choo, H.-K. Lee, J.-E. Park, and Y.-H. Kim, "Analysis of Electromagnetic Interference between Open Cable Trays," will be appeared in IEEE Access.
50. T.-Tung, J.-H. Lee, M.-T. Nguyen, and Y.-H. Kim, "Sum rate maximization for multi-user wireless powered IoT network with non-linear energy harvester: time and power allocation," IEEE Access 7 (2019): 149698-149710..
49. T.-Tung, J.-H. Lee, M.-T. Nguyen, and Y.-H. Kim, "Machine learning-based relay selection for secure transmission in multi-hop DF relay networks," Electronics, 8(9), (2019): 949.
48. M.-T. Nguyen, and Y.-H. Kim, "Bidirectional long short-term memory neural networks for linear sum assignment problems," Applied Sciences, 9(17), 3470.
47. J. Choo, J. E. Park, H. Choo, and Y.-H. Kim, "Electromagnetic interference caused by parasitic electric-line current on a digital module in a closed cabinet," IEEE Access, 7, 59806-59812.
46. M. A. Khan, J. Choo, and Y.-H. Kim, "End-to-end partial discharge detection in power cables via time-domain convolutional neural networks," Journal of Electrical Engineering and Technology, vol. 14, no. 3, pp. 1299-1309.

45. M. A. Khan, Y.-H. Kim, and J. Choo, "Intelligent fault detection using raw vibration signals via dilated convolutional neural networks," *The Journal of Supercomputing* (2018): 1-15. <https://doi.org/10.1007/s11227-018-2711-0>.
44. V.-H. Nguyen, M.-T. Nguyen, J. Choi, and Y.-H. Kim, "NLOS identification in WLANs using deep LSTM with CNN features," *Sensors*, vol. 18, no.11, 4057, Nov. 2018.
43. J. Choo, J. Choo, and Y.-H. Kim, "Evaluation of electromagnetic interference from axially ruptured coaxial cable with multiple dielectrics used in nuclear power plants," *IEEE Trans. Electromagnetic Compatibility*, pp. 1-10, July 2018.
42. Y.W. Youn, D. H. Hwang, S. J. Song, and Y.-H. Kim, "Detection and classification of demagnetization and short-circuited turns in permanent magnet synchronous motors," *Journal of Electrical Engineering and Technology*, vol. 13, no. 4, pp. 1613-1621, Jul. 2018.
41. M.-T. Nguyen, V.-H. Nguyen, and **Y.-H. Kim**, "Recurrent Neural Network for Partial Discharge Diagnosis in GIS," *Energies*, vol. 18, no. 11, 1202, May 2018.
40. W.-H. Lee, J.-S. Choi, **Y.-H. Kim**, J.-H. Lee, and S.-C. Kim, "Adaptive sector coloring game for geometric network information-based inter-cell interference coordination in wireless cellular networks," *IEEE/ACM Trans. Networking*, vol. 26, no. 1, pp. 288-301, Feb. 2018.
39. J. Choo, J. Choo, and **Y.-H. Kim**, "Shielding Effectiveness of Open Cabinet Containing Digital Modules Using Ferrite Sheet," *IEEE Trans. Magnetics*, vol. 53, no. 12, pp. 2900609, Dec. 2017.
38. J.-W. Choi, **Y.-H. Kim**, J.-H. Lee, and S.-C. Kim, "Cyclic prefix-aided linear trajectory search for phase-noise mitigation in CO-OFDM systems," *IET Optoelectronics*, vol. 11, no. 6, pp. 225-229, Nov. 2017.
37. J.-H. Lee, I. Sohn, and **Y.-H. Kim**, "Simultaneous wireless power transfer and secure multicasting in cooperative decode-and-forward relay networks," *Sensors*, vol. 17, no. 5, 1128, May 2017.
36. W.-H. Lee, J. Choi, J.-H. Lee, **Y.-H. Kim**, and S.-C. Kim, "Distributed Power Control-Based Connectivity Reconstruction Game in Wireless Localization," *IEEE Communications Letters*, vol. 21, no. 2, pp. 334-337, Feb. 2017.
35. J.-H. Lee, I. Sohn, and **Y.-H. Kim**, "Transmit power allocation for physical layer security in cooperative multi-hop full-duplex relay networks," *Sensors*, vol. 16, no. 10, 1726, Oct. 2016.
34. J.-H. Lee, I. Sohn, S. Song, and **Y.-H. Kim**, "Cooperative decode-and-forward relaying for secure multicasting," *ETRI Journal*, vol. 38, no. 5, pp. 934-940, Oct. 2016.
33. J.-H. Lee, I. Sohn, and **Y.-H. Kim**, "Analog cancelation schemes for full-duplex MIMO OFDM systems," *AEU-International Journal of Electronics and Communications*, vol. 70, no. 3, pp. 272-277, Mar. 2016.
32. Y.-S. Sung, **Y.-H. Kim**, J.-H. Lee, and S.-C. Kim, "Be cautious when analyzing the sampling clock offset in OFDM systems," *Wireless Personal Communications*, vol. 85, no. 4, pp. 1701-1711, Dec. 2015.
31. **Y.-H. Kim** and J.-H. Lee, "Channel estimation for self-Interference cancellation in full duplex wireless systems," *Wireless Personal Communications*, vol. 85, no. 3, pp. 1139-1152, Dec. 2015.
30. J. Choi, W.-H. Lee, **Y.-H. Kim**, J.-H. Lee, and S.-C. Kim, "Throughput estimation based distributed base station selection in heterogeneous networks," *IEEE Transactions on Wireless Communications*, vol. 14, no. 11, pp. 6137-6149, Nov. 2015.

29. D. H. Hwang, Y.-W. Youn, J. H. Sun, K. H. Choi, J. H. Lee, and **Y. H. Kim**, "Support vector machine based bearing fault diagnosis for induction motors using vibration signals," *Journal of Electrical Engineering and Technology*, vol. 10, no. 4, pp. 1559-1566, Jul. 2015.
28. J.-H. Lee, J. Choi, J.-H. Jung, S.-C. Kim, and **Y.-H. Kim**, "Analog cancellation for full-duplex wireless in multipath self-interference channels," *IEICE Transactions on Communications*, vol. E98-B, no. 4, pp. 646-652, Apr. 2015.
27. Yu-Suk Sung, **Yong-Hwa Kim**, Illsoo Sohn, Seong-Cheol Kim, and Jong-Ho Lee, "Optimal subcarrier pairing for MRC in powerline/wireless diversity OFDM systems," *Electric Power Systems Research*, vol. 121, pp. 200-206, Apr. 2015.
26. D. H. Lee, and **Y. H. Kim**, "Empirical evidence of network neutrality-The incentives," *Information Economics and Policy*, vol. 29, pp. 1-9, Dec. 2014.
25. Jong-Ho Lee and **Yong-Hwa Kim**, "Compressed channel sensing using designated null subcarriers in full duplex wireless OFDM systems," *Wireless Personal Communications*, vol. 79, no. 3, pp. 1635-1645, Dec. 2014.
24. Yu-Suk Sung, Jong-Ho Lee, **Yong-Hwa Kim**, and Seong-Cheol Kim, "Optimal subcarrier pairing scheme for maximal ratio combining in OFDM power line communications," *AEU-International Journal of Electronics and Communications*, vol. 68, no. 9, pp. 893-898, Sep. 2014.
23. Jae-Hoon Jung, Joonghee Lee, Jong-Ho Lee, **Yong-Hwa Kim**, and Seong-Cheol Kim, "Ray-tracing-aided modeling of user-shadowing effects in indoor wireless channels," *IEEE Trans. on Antennas and Propagation*, vol. 62, no. 6, pp. 3412-3416, Jun. 2014.
22. Jong-Ho Lee and **Yong-Hwa Kim**, "Diversity relaying for parallel use of power-line and wireless communication networks," *IEEE Trans. on Power Delivery*, vol. 29, no. 3, pp. 1301-1310, Jun. 2014.
21. **Yong-Hwa Kim**, Young-Woo Youn, Sang-Hwa Yi, Don-Ha Hwang, Jong-Ho Sun, and Jong-Ho Lee, "High-resolution partial discharge location estimation in power cables," *IEEE Trans. on Dielectrics and Electrical Insulation*, vol. 21, no. 2, pp. 758-765, Apr. 2014.
20. S.-G. Yoon, S. Jang, **Y.-H. Kim**, and S. Bahk, "Opportunistic Routing for Smart Grid With Power Line Communication Access Networks," *IEEE Trans. Smart Grid*, vol. 5, no. 1, pp. 303-311, Jan. 2014.
19. D.-H. Hwang, Y.-W. Youn, J.-H. Sun, and **Y.-H. Kim**, "Robust Diagnosis Algorithm for Identifying Broken Rotor Bar Faults in Induction Motors," *J. Electr. Eng. Technol.*, vol. 9, no. 1, pp. 37-44, Jan. 2014.
18. H.-K. Lee, **Y.-H. Kim**, Y.-H. Kim, and S. C. Kim, "Emission Security Limits for Compromising Emanations Using Electromagnetic Emanation Security Channel Analysis," *IEICE Trans. Commun.*, vol. E96-B, no. 10, pp. 2639-2649, Oct. 2013.
17. **Y. H. Kim**, Y. W. Young, D. H. Wang, J. H. Sun, and D. S. Kang, "High-resolution parameter estimation method to identify broken rotor bar faults in induction motors," *IEEE Trans. Industrial Electronics*, vol. 60, no. 9, pp. 4103-4117, Sept. 2013.
16. Y. W. Youn, S. H. Yi, D. H. Hwang, J. H. Sun, D. S. Kang, and **Y. H. Kim**, "MUSIC-based diagnosis algorithm for identifying broken rotor bar faults in induction motors using flux signal," *J. Electr. Eng. Technol.*, vol. 8, no. 2, pp. 288-294, Mar. 2013.
15. J. H. Lee, and **Y. H. Kim**, "Non-cooperative limited feedback precoding with subchannel selection in MIMO interference channels," *IEICE Trans. Commun.*, vol. E96-B, no. 1, Jan. 2013.

14. Y. W. Kwak, J. H. Lee, **Y. H. Kim**, and S. C. Kim, "Precoder design and capacity analysis for multi-antenna full-duplex relay," *IEICE Trans. Commun.*, vol. E95-B, no. 7, pp. 2446-2450, July 2012.
13. **Y. H. Kim**, S. S. Choi, S. C. Kim, J. H. Lee, "Capacity of OFDM two-hop relaying systems for medium-voltage power line access networks," *IEEE Trans. Power Delivery*, vol. 27, no. 2, pp. 886-894, Apr. 2012.
12. K. H. Kim, H. B. Lee, **Y. H. Kim**, J. H. Lee, and S. C. Kim, "Cooperative multihop AF relay protocol for medium-voltage power-line-access network," *IEEE Trans. Power Delivery*, vol. 27, no. 1, pp. 195-204, Jan. 2012.
11. **Y. H. Kim**, and J. H. Lee, "Comparison of Passband and Baseband Transmission Schemes for Power-Line Communication OFDM Systems," *IEEE Trans. Power Delivery*, vol. 26, no. 4, pp. 2466-2475, Oct. 2011.
10. **Y. H. Kim**, and J. H. Lee, "Joint Maximum Likelihood Estimation of Carrier and Sampling Frequency Offsets for OFDM Systems," *IEEE Trans. Broadcasting*, vol. 57, no. 2, pp. 277-283, June 2011.
9. **Y. H. Kim**, "Multipath parameter estimation for PLC channels using the GESE algorithm," *IEEE Trans. Power Delivery*, vol. 25, no. 4, pp. 2339-2345, Oct. 2010.
8. J. W. Choi, Y. S. Sung, **Y. H. Kim**, and S. C. Kim, "Performance of UWB channel gain estimation algorithm based on frequency response correction," *IEICE Trans. Commun.*, vol. E93-B, no. 6, pp. 1624-1627, June 2010.
7. **Y. H. Kim**, "Multipath parameter estimation for radio propagation channel measurements with a vector network analyzer," *IEEE Trans. Vehicular Technology*, vol. 59, no. 1, pp. 48-52, Jan. 2010.
6. **Y. H. Kim**, J. H. Lee, and S. C. Kim, "Corrections to Carrier frequency synchronization for OFDM systems in the presence of phase noise," *IEICE Trans. Commun.*, vol. E92-B, no. 3, pp. 1043-1044, Mar. 2009.
5. J. W. Choi, J. S. Kang, **Y. H. Kim**, and S. C. Kim, "Modeling of localization error in wireless sensor network," *IEICE Trans. Commun.*, vol. E92-B, no. 2, pp. 628-631, Feb. 2009.
4. S. W. Lee, Y. J. Park, **Y. H. Kim**, and K. H. Kim, "Adaptive threshold control for a 1-bit ADC in a low complex IR-UWB receiver," *IEICE Trans. Fundam.*, vol. E92-A, no. 2, pp. 677-680, Feb. 2009.
3. **Y. H. Kim**, and S. C. Kim, "Joint channel estimation and phase noise suppression for OFDM systems," *IEICE Trans. Commun.*, vol. E91-B, no. 10, pp. 3371-3374, Oct. 2008.
2. **Y. H. Kim**, J. H. Lee, and S. C. Kim, "Carrier frequency synchronization for OFDM systems in the presence of phase noise," *IEICE Trans. Commun.*, vol. E90-B, no. 6, pp. 1543-1546, June 2007.
1. **Y. H. Kim**, J. H. Lee, and S. C. Kim, "Channel estimation for OFDM-based WLANs in the presence of Wiener phase noise and residual frequency offset," *IEICE Trans. Commun.*, vol. E89-B, no. 5, pp. 1709-1712, May 2006.