

ZHENGQING YUN

EDUCATION

Ph. D.: 1994, Electrical Engineering, Chongqing University, Chongqing, China.

EXPERIENCE

Aug. 2010-Present: *Associate Professor, University of Hawaii at Manoa, USA*
Jan. 2006-July 2010: *Assistant Professor, University of Hawaii at Manoa, USA*
June 2002-2005: *Assistant Researcher, University of Hawaii at Manoa, USA*
March 2000-May 2002: *Research Assistant Professor, University of Utah, USA.*
June 1997-March 2000: *Postdoctoral Research Fellow, University of Utah, USA.*
Jan. 1995-May 1997: *Postdoctoral Research Fellow, Southeast University, China.*

RESEARCH INTERESTS

- Propagation prediction and simulation for wireless communications systems including 3G, MIMO, Wireless LAN, and UWB systems.
- Research and development of new computational methods for simulation of electromagnetics (Ray-tracing, FDTD, FEM, and BEM).
- Detection of UXO and IED; Ground penetration radar.
- Analysis and design of antenna arrays (2D beam steering antennas, CTS technology)
- Simulation of interaction of radio waves with the human head.

PROFESSIONAL SERVICES

- *Associate Editor*, IEEE Access, 2013~present
- *Associate Editor*, IEEE Transactions on Antennas and Propagation, 2010~present
- *Associate Editor*, IEEE Transactions on Vehicular Technology, 2007~2010
- *Chair*, Technical Program Committee, IEEE International Conference on Wireless Information Technology and Systems, 2012, Honolulu, Hawaii
- *Chair*, Technical Program Committee, IEEE International Conference on Wireless Information Technology and Systems, 2010, Honolulu, Hawaii

SOCEITY

- Institute of Electrical and Electronics Engineers (IEEE), USA.

SELECTED PUBLICATIONS (last five years)

Journal Papers

1. S. Y. Lim, Z. Yun, and M. F. Iskander, "Propagation Measurement and Modeling for Indoor Stairwells at 2.4 and 5.8 GHz," *IEEE Transactions on Antennas and Propagation*, vol. 60, no. 9, pp. 4754-4761, Sept. 2014.
2. F. K. Sharifabad, M. A. Jensen, Z. Yun, "Closed-form evaluation of the MIMO channel spatial covariance," *IEEE Transactions on Antennas and Propagation*, Feb., 2013, pp. 901-909.
3. N. Omaki, Z. Yun, N. Celik, H.-S. Youn, and M. F. Iskander, "Effective HF Radar Installation in Challenging Terrain Environments for Homeland Security Applications," *IEEE Antenna and Wireless Propagation Letters*, vol. 10, pp.1143-1146, 2011.
4. J. S. Kobashigawa, H.-S. Youn, M. F. Iskander, Z. Yun, "Classification of buried targets using ground penetrating radar: comparison between genetic programming and neural networks," *IEEE Antenna and Wireless Propagation Letters*, vol. 10, pp. 971-974, 2011.

5. M. F. Iskander, Z. Yun, N. Celik, H.-S. Youn, N. Omaki, and J. Baker, "HF and passive radar designs for homeland security applications," *Marine Technology Society (MTS) Journal*, vol. 45, no. 3, pp. 111-119, May/June 2011.
6. J.-H. Deng, N. Celik, Z. Yun, and M. F. Iskander, "Low complexity hybrid smart antenna with directional elements over frequency selective fading channel," *IEICE Trans. Commun.*, vol. E94-B, No. 12, pp. 3610-3613, Dec. 2011.
7. Z. Yun, S. Y. Lim, and M. F. Iskander, "Use of geospatial resources for radio propagation prediction in urban areas," *IEEE Antenna and Wireless Propagation Letters*, vol. 8, pp. 587-591, 2009.
8. S. Y. Lim, Z. Yun, J. M. Baker, N. Celik, H.-S. Youn, and M. F. Iskander, "Propagation modeling and measurement for a multi-floor stairwell," *IEEE Antenna and Wireless Propagation Letters*, vol. 8, pp. 583-586, 2009.

Conference Papers

1. D. A. Bibb, Z. Yun, and M. F. Iskander, "Source Localization Using Time Reversal in Urban Environments: A Ray Tracing Approach", 2014 *IEEE International Symposium on Antennas and Propagation and the 2012 USNC/URSI National Radio Science Meeting*, 2014.
2. D. A. Bibb, Z. Yun, and M. F. Iskander, "Computational Accuracy and Speed of Some Knife-Edge Diffraction Models", 2014 *IEEE International Symposium on Antennas and Propagation and the 2012 USNC/URSI National Radio Science Meeting*, 2014.
3. Z. Yun, and M. F. Iskander, "Diffraction from multiple ridges: comparing three- and two-dimensional results," *The 8th European Conference on Antennas and Propagation*, The Hague, Netherlands, April 2014.
4. H. Xu, Z. Yun, and M. F. Iskander, "Determination of multiple diffraction ray paths for arbitrary oriented straight edges," 2013 *IEEE International Symposium on Antennas and Propagation and the 2013 USNC/URSI National Radio Science Meeting*, Orlando, July 7-13, 2013.
5. Z. Yun, M. F. Iskander, N. Omaki, and A. Barrios, "Propagation modeling for advanced wireless communication systems," 2013 *IEEE International Microwave Symposium Workshop, Satcom and Aerospace Beyond Ka-Band: Progress and Challenges*, Friday, June 7, 2013, Seattle.
6. Z. Yun, M. F. Iskander, N. Omaki, and A. Barrios, "Impact of realistic propagation modeling and mutual coupling effects on estimation of MIMO capacity," 2012 *IEEE International Conference on Wireless Information Technology and Systems*, Maui, Hawaii, Nov. 11-16, 2012.
7. N. Omaki, Z. Yun, M. F. Iskander, "Split-step parabolic equation method: a comparative study," 2012 *IEEE International Conference on Wireless Information Technology and Systems*, Maui, Hawaii, Nov. 11-16, 2012.
8. Z. Yun, N. Omaki, and M. F. Iskander, "Ridge Feature Extraction and Effect on Radio Propagation for Wireless Communications," 2012 *IEEE International Symposium on Antennas and Propagation and the 2012 USNC/URSI National Radio Science Meeting*, Chicago, July 8-14, 2012.
9. Soo Yong Lim, Zhengqing Yun, Magdy F. Iskander, "Radio Propagation Modeling in Indoor Stairwell: a K-Means Clustering Approach," 2012 *IEEE International Symposium on Antennas and Propagation and the 2012 USNC/URSI National Radio Science Meeting*, Chicago, July 8-14, 2012.
10. N. Omaki, Z. Yun, and M. F. Iskander, "Accuracy of parabolic wave equation method in short propagation range," 2012 *IEEE International Symposium on Antennas and Propagation and the 2012 USNC/URSI National Radio Science Meeting*, Chicago, July 8-14, 2012.