

DENNIS OGBE

Education

Purdue University <i>Doctor of Philosophy in Electrical Engineering</i> Focus Area: Communications, Networking, Signal & Image Processing	West Lafayette, IN 2014 – present
Tennessee Technological University <i>Bachelor of Science in Electrical Engineering</i> Graduation Honors: <i>magna cum laude</i>	Cookeville, TN 2010 – 2014

Professional Experience

Academic Positions	
Purdue University <i>Graduate Research Assistant</i>	West Lafayette, IN 2015 – present
Purdue University <i>Graduate Teaching Assistant</i>	West Lafayette, IN 2014 – 2015
Industry Positions	
Nokia Bell Labs <i>R&D Summer Trainee</i> Small Cell Research Group	Arlington Heights, IL May 2016 – August 2016

Teaching Experience

University Courses	
ECE 264 Advanced C Programming (Teaching Assistant)	2014 – 2015
Workshops	
Intro to \LaTeX (Instructor, facilitated through Purdue Graduate School)	2016 – present
Intro to <code>git</code> (Instructor)	2018

Honors and Accomplishments

DARPA Spectrum Collaboration Challenge: \$750,000 prize (Phase 1)	2018
Purdue ECE Magoon Award for Excellence in Teaching	2015
CoSIDA Academic All-America Team	2014
Tennessee Tech Athletics Man of the Year	2014

Professional Service and Activities

Professional and Honorary Society Memberships	
Institute of Electrical and Electronics Engineers (IEEE) <i>Student Member</i>	2013 – present
Eta Kappa Nu (HKN) <i>President (Beta Chapter)</i>	Fall 2015 – Spring 2016, Fall 2017
<i>Recording Secretary (Beta Chapter)</i>	Spring 2015
Tau Beta Pi Inducted in 2013	
Organizing Committee Member	
Co-Chair, IEEE-HKN Student Leadership Conference Organizing Committee	2017

Peer Reviewer	
IEEE Transactions on Communications	2016
IEEE Transactions on Microwave Theory and Techniques	2016
IEEE Wireless Communications Letters	2016 – present
IEEE Vehicular Technology Conference	Fall 2016

Session Chairman	
Session Co-Chairman, IEEE Asilomar Conference on Signals, Systems, and Computers, “MP1b: mmWave Communications I”	October 2018

Publications and Scholarly Work

Serial Journal Articles

- [1] **D. Ogbe**, D. J. Love, and V. Raghavan, “Noisy Beam Alignment Techniques for Reciprocal MIMO Channels,” *IEEE Transactions on Signal Processing*, vol. 65, no. 19, pp. 5092–5107, Oct. 2017.
- [2] S. Goguri, **D. Ogbe**, S. Dasgupta, R. Mudumbai, D. R. Brown, D. J. Love, and U. Madhow, “Optimal precoder design for distributed transmit beamforming over frequency-selective channels,” *IEEE Transactions on Wireless Communications*, vol. 17, no. 11, pp. 7759–7773, Nov. 2018.
- [3] **D. Ogbe**, D. J. Love, M. Rebholz, and P. Bidigare, “Efficient Channel Estimation for Aerial Wireless Communications,” *IEEE Transactions on Aerospace and Electronic Systems (in press)*, pp. 1–1, 2019.

Conference Proceedings and Presentations.....

- [1] **D. Ogbe**, D. J. Love, and V. Raghavan, “Iterative beam alignment algorithms for TDD MIMO systems,” in *2017 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Mar. 2017, pp. 3469–3473.
- [2] S. Goguri, **D. Ogbe**, R. Mudumbai, D. Love, S. Dasgupta, and P. Bidigare, “Maximizing wireless power transfer using distributed beamforming,” in *2016 50th Asilomar Conference on Signals, Systems and Computers*, Nov. 2016, pp. 1775–1779.
- [3] C.-C. Wang, D. J. Love, and **D. Ogbe**, “Transcoding: A New Strategy for Relay Channels,” in *55th Annual Allerton Conference on Communication, Control and Computing*, Oct. 2017.
- [4] **D. Ogbe**, V. Raghavan, and D. J. Love, “Characterizing and Adapting to the Structure of Millimeter Wave Channel Covariance Matrices,” in *To appear in: Asilomar Conference on Signals, Systems, and Computers*, Oct. 2018.

Other Presentations and Posters.....

- [1] **D. Ogbe** and D. J. Love, *Distributed MIMO for Communications and Sensing*, Presented at the Purdue Symposium on Global Security and Defense Innovation, 2016.
- [2] **D. Ogbe**, *DARPA Spectrum Collaboration Challenge: The Convergence of Communication, Computation, and Collaboration*, Presented at the 2018 Information Theory and Applications Workshop in San Diego (talk only), 2018.
- [3] C.-C. Wang, D. J. Love, and **D. Ogbe**, *Transcoding: A New Strategy for Relay Channels*, Presented at IEEE Communication Theory Workshop, Miramar Beach, FL (poster only, no paper), May 2018.