OluFemi A. Omitaomu

Contact Information

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Current Research Interests

- Infrastructure Systems Reliability and Resilience
- Reliability of Information Technology in Healthcare
- Applied Artificial Intelligence in Energy Systems

Current Positions

- Senior R&D Staff, Modeling and Simulation Group, Computational Sciences and Engineering Division, Oak Ridge National Laboratory, Tennessee.
- Joint ORNL-UT Associate Professor, Department of Industrial and Systems Engineering, University of Tennessee, Knoxville, Tennessee.

Education

Ph.D., Industrial Engineering, University of Tennessee, May 2006.M.S., Mechanical Engineering, University of Lagos, Nigeria, Dec. 1999.B.S., Mechanical Engineering, Lagos State University, Nigeria, May 1995.

Professional Experience

- April 2018 to Date, *Senior R&D Staff (Principal Research Scientist)*, Computational Sciences and Engineering Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- January 2012 to March 2018, *Senior Research Scientist*, Computational Sciences and Engineering Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- October 2014 to Present, *Joint ORNL-UT Associate Professor*, Department of Industrial and Systems Engineering, University of Tennessee, Knoxville.
- October 2014 to Present, *Adjunct Associate Professor*, Department of Civil and Environmental Engineering, University of Tennessee, Knoxville.
- November 2009 to September 2014, **Adjunct Faculty**, Department of Industrial and Systems Engineering, University of Tennessee, Knoxville.
- July 2009 to December 2011, *Research Scientist*, Computational Sciences and Engineering Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

- Oct. 2006 to July 2009, *Post-Doctoral Researcher*, Oak Ridge Associated Universities Affiliated with the Computational Sciences and Engineering Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Feb. 2006 Sept. 2006, *Post-Doctoral Research Fellow*, Advanced Optimization Laboratory, Data Mining Group, McMaster University, Hamilton ON, Canada.
- Jan. 2001 May 2006, *Research Associate (as a part of the Ph.D. Degree)*, Department of Industrial and Information Engineering, University of Tennessee.
- June 1995 Dec. 2000, *Project Engineer*, Mobil Producing Nigeria.

University Teaching Experience

- Aug. 2003 July 2005, *Instructor*, Engineering Economic Analysis (Required Undergraduate Course), Department of Industrial and Information Engineering, University of Tennessee.
- Aug. 2002 July 2003, *Laboratory Instructor/Teaching Assistant*, Engineering Statics and Dynamics, College of Engineering ENGAGE Program, University of Tennessee.
- Jan. 2001 July 2002, *Teaching Associate*, Advanced Engineering Economic Analysis, Department of Industrial and Information Engineering, University of Tennessee.

Grants

- External:
 - FY2018 & FY2019 Department of Veterans' Affairs Investigator: Hazard Detection in Health Information Technology \$1,500,000
 - FY2018 DOE Office of Electricity PI: Siting Reserve Power \$110,000.
 - FY2017 & FY2016 DOE Office of Electricity PI: Cognitive EMS \$524,197.
 - FY2017 National Geospatial-Intelligence Agency PI: EARSS \$328,561.
 - FY2017 University of Tennessee Co-PI: ELA \$23,713.
 - FY2017 University of Tennessee Co-PI: ELA \$2,727.
 - FY2017 DOE EPSA Co-PI: Solar Deployment Analytics \$49,000.
 - FY2013 NRECA Co-PI: Open Framework \$23,630.
 - FY2010 to FY2015 DOE Office of Nuclear Energy Lead Performer: OR-SAGE \$1,250,000.
- Internal:
 - FY2017 & FY2016 DOE SEED PI: Precision De-icing Analysis \$187,135.
 - FY2016 & FY2015 DOE LDRD PI: Urban-CAT \$610,787.
 - FY2013 & FY2014 DOE Launch PI: CoNNECT for Real-Time Analytics \$49,907.
 - FY2012 & FY2011 DOE LDRD PI: CoNNECT \$328,871

Invited Guest Lectures

- Feb. 2018 *Public Lecture Guest Speaker* on "Decision Support Tools for the Emerging Smart and Connected Infrastructures" as part of the Presidential Dream Course on Analytics of Resilient Cyber-Physical-Social Networks, Department of Industrial and Systems Engineering, University of Oklahoma.
- Feb. 2018 *Classroom Lecture Guest Speaker* on "Decision Support Tools for Infrastructures Resiliency and Security" as part of the Presidential Dream Course on

Analytics of Resilient Cyber-Physical-Social Networks, Department of Industrial and Systems Engineering, University of Oklahoma.

- April 2017 Invited Lecture on "Urban Resiliency Research at ORNL", Department of Civil and Environmental Engineering, Northeastern University.
- April 2012 Invited Speaker on Analytics for the Smart Grids, Department of Systems Engineering, Air Force Institute of Technology.
- Dec. 2010 Invited Speaker on Data Product for Situational Awareness of the Electric Grid System at the AFIT-AFRL Product Development Research Symposium, Air Force Institute of Technology.
- March 2007 *Guest Speaker*, Advanced Data Mining for Engineering (Graduate Elective Course), Department of Industrial and Information Engineering, University of Tennessee.
- Oct. 2005 *Guest Instructor*, Advanced Data Mining for Engineering and Manufacturing (Graduate Elective Course), Department of Industrial and Information Engineering, University of Tennessee.

Awards and Honors

- External
 - July 2016: <u>Election as a Senior Member of the Institute of Electrical and</u> <u>Electronics Engineers (IEEE).</u>
 - May 2016: <u>2015 ISERC Best Track Paper Award in Modeling and Simulation (A</u> <u>Decision Analysis Tool for Climate Impacts, Adaptations, and Vulnerabilities)</u>, Institute of Industrial Engineers.
 - July 2015: <u>2015 R&D 100 Award Finalist</u> Software/Services: CoNNECT 2.0: Activity-Based Recommender System for Energy Services.
 - June 2015: <u>2015 ISERC Best Track Paper Award in Modeling and Simulation</u> (Optimization Based Data Mining Approach for Forecasting Energy Demand), Institute of Industrial Engineers.
 - May 2013: <u>Election as a Senior Member of the Institute of Industrial and Systems</u> Engineers (IISE).
 - May 2004: <u>The Outstanding Ph.D. Student Award</u>, Department of Industrial and Information Engineering, University of Tennessee.
 - December 1995: Five Awards as the Best Graduating Student (three awards at the Department (of Mechanical Engineering) level, one award at the College (of Engineering) level, and one award at the University level (Lagos State University).

• Internal

- December 2017: <u>Technology Commercialization Award</u>, Oak Ridge National Laboratory.
- October 2017: <u>UT-Battelle Mentor of Student Researchers Award</u>, Oak Ridge National Laboratory.
- October 2017: <u>Best Seed Money Fund Poster Award</u>, Oak Ridge National Laboratory.
- December 2016: <u>Significant Event Award Transition of DOE's EAGLE-I to</u> <u>ORNL</u>, Oak Ridge National Laboratory.

- October 2015: <u>Significant Event Award Development of a New Virtualization</u> of the Evolving Power Grid, Oak Ridge National Laboratory.
- January 2015: <u>Appreciation Award on the development of Oak Ridge Siting</u> <u>Analysis for Power Generation Expansion</u>, Reactor and Nuclear Systems Division, Oak Ridge National Laboratory.
- December 2014: <u>Technology Commercialization Award</u>, Oak Ridge National Laboratory.
- July 2014: <u>Award for Intellectual Property</u>, Computational Sciences and Engineering, Oak Ridge National Laboratory.
- November 2012: <u>Distinguish Employee's Award</u> Computational Sciences and Engineering Division, Oak Ridge National Laboratory.
- August 2010: <u>Exceptional Mentoring Award</u> Research Alliance in Math and Science 2010 Summer Internship, U.S. Department of Energy Office of Science.
- November 2009: <u>Engineering R&D Team Award</u>, Oak Ridge National Laboratory.
- August 2008: <u>Significant Event Award Successful design and implementation</u> of Visualizing Energy Resources Dynamically on Earth (VERDE), Oak Ridge National Laboratory.

Publications

<u>Books</u>

- 1. <u>Olufemi A. Omitaomu</u> (2013). Intelligent Process Monitoring and Control Using Sensor Data. Germany: Lap Lambert Academic Publishing, March.
- 2. Adedeji B. Badiru and <u>Olufemi A. Omitaomu</u> (2011). Handbook of Industrial Engineering Equations, Formulas, and Calculations. New York, NY: CRC Press, January.
- Mohamed M. Gaber, Ranga Raju Vatsavai, <u>Olufemi A. Omitaomu</u>, Nitesh V. Chawla, and Auroop R. Ganguly (2010). *Knowledge Discovery from Sensor Data*. 1st Edition. Lecture Notes in Computer Science, Springer, May.
- 4. Auroop R. Ganguly, Joao Gama, <u>Olufemi A. Omitaomu</u>, Mohamed M. Gaber, and Ranga Raju Vatsavai (2009). *Knowledge Discovery from Sensor Data*. New York, NY: CRC Press, January.
- 5. Adedeji B. Badiru and <u>Olufemi A. Omitaomu</u>. (2007). *Computational Economic Analysis for Engineering and Industry*. New York, NY: CRC Press, June.

Book Chapters

- Olufemi A. Omitaomu, Bandana Kar, Randy J. Belles, Michael P. Poore, Gary T. Mays, and Budhendra L. Bhaduri (2018). Innovative approach to infrastructure resilience: a case study of evaluating Department of Defense sites for small modular reactors. In Adedeji B. Badiru and Cassie B. Barlow (Eds.) *Defense Innovation Handbook: Guidelines, Strategies, and Techniques*, New York, NY: CRC Press.
- Chandola, V, <u>Olufemi A. Omitaomu</u>, Fernandez, S.J. (2016) Data Analysis for Real-Time Identification of Grid Disruptions. In Ting Yu, Nitesh Chawla, Simeon Simoff (Eds.) *Computational Intelligent Data Analysis for Sustainable Development*, New York, NY: CRC Press.

- 8. <u>Olufemi A. Omitaomu</u> (2015). Energy Measurement. In Adedeji B. Badiru and LeeAnn Racz (Eds.) *Handbook of Measurements*, New York, NY: CRC Press.
- Olufemi A. Omitaomu (2013). Engineering Economic Evaluation. In Adedeji B. Badiru (Ed.), Handbook of Industrial and Systems Engineering, Volume 2, New York, NY: CRC Press.
- Olufemi A. Omitaomu, Steven J. Fernandez, and Budhendra L. Bhaduri (2013). Framework for Real-time, All-Hazards Global Situational Awareness. In Adedeji B. Badiru and LeeAnn Racz (Eds.), *Handbook of Emergency Response: A Human Factors and Systems Engineering Approach*, August. CRC Press.
- Varun Chandola, <u>Olufemi A. Omitaomu</u>, and Steven J. Fernandez (2012). Data Analysis for Real Time Identification of Grid Disruptions. In Ting Yu, Nitesh Chawla, and Simeon Simoff (Eds.), *Computational Intelligent Data Analysis for Sustainable Development*. Taylor & Francis, London, UK.
- 12. <u>Olufemi A. Omitaomu</u> (2009). Engineering Economic Analysis. In: Hossein Bidgoli (Ed.), *The Handbook of Technology Management*, Wiley.
- 13. Myong K. Jeong, Seong G. Kong, and <u>Olufemi A. Omitaomu</u> (2008). Data Mining in Multi-Dimensional Functional Data for Manufacturing Fault Diagnosis. In T. Warren Liao and Evangelos Triantaphyllou (Eds.), *Recent Advances in Data Mining of Enterprise Data: Algorithms and Applications*: pp. 463-504, Singapore: World Scientific.
- Auroop R. Ganguly, <u>Olufemi A. Omitaomu</u>, and Randy M. Walker (2007). *Knowledge discovery from sensor data for security applications*. In: Gaber, M. and J. Gama (eds.), *Learning from Data Streams Processing Techniques in Sensor Networks*: pp. 187-204, Springer-Verlag.
- Ganguly, A.R., Fang, Y., Khan, S. and <u>Olufemi A. Omitaomu</u> (2007). *Knowledge* discovery from sensor data for scientific applications. In: Gaber, M. and J. Gama (eds.), *Learning from Data Streams – Processing Techniques in Sensor Networks*: pp. 205-229, Springer-Verlag.
- 16. <u>Olufemi A. Omitaomu</u> (2006). Engineering Economic Evaluation. In Adedeji B. Badiru (Ed.), *Handbook of Industrial and Systems Engineering*, New York, NY: CRC Press.
- 17. <u>Olufemi A. Omitaomu</u> (2006). Decision Trees. In Michael W. Berry and Murray Browne (Eds.), *Lecture Notes in Data Mining*: pp. 39-51, New Jersey, NJ: World Scientific Publishing of Hackensack.
- <u>Olufemi A. Omitaomu</u> (2006). Clustering: Categorical Attributes. In Michael W. Berry and Murray Browne (Eds.), *Lecture Notes in Data Mining*: pp. 143-152, New Jersey, NJ: World Scientific Publishing of Hackensack.

Refereed Journal/Conference Articles (* indicates Mentees)

- 19. *Susan Kotikot, Christine Ajinjeru, Wale Odukomaiya, and <u>Olufemi A. Omitaomu</u> (2018). Geospatial Framework for Estimating Household Electricity Demand for Urban Infrastructure Planning in Select African Countries. In *PowerAfrica, 2018 IEEE PES*. IEEE.
- 20. <u>Olufemi A. Omitaomu</u> and Bandana Kar (2018). Understanding Infrastructure Dependency During Natural Hazards Events for Actionable Disaster Responses. *Proceedings of the Industrial and Systems Engineering Research Conference*. May.
- 21. Xueping Li, *Mohammad Ramshani, Anahita Khojandi, <u>Olufemi A. Omitaomu</u>, and Jon Michael Hathaway (2017). An Agent-Based Model for Joint Placement of PV Panels and

Green Roofs. Proceedings of the 2017 Winter Simulation Conference, INFORMS, Las Vegas, Nevada, Dec.

- 22. *Ajinjeru, C., *Odukomaiya, A., and <u>Olufemi A. Omitaomu</u>. (2017). Development of a modeling framework to forecast power demands in developing regions: Proof of concept using Uganda. In *PowerAfrica*, 2017 IEEE PES (pp. 506-511). IEEE.
- 23. *Rodriguez, T.K., <u>Olufemi A. Omitaomu</u>, Ostrowski, J.A., and Bhaduri, B.L. (2017). Modeling Road Vulnerability to Snow Using Mixed Integer Optimization. *Proceedings* of the Industrial and Systems Engineering Conference. May.
- *Fialkoff, M.R., <u>Olufemi A. Omitaomu</u>, Peterson, S.K., and Tuttle, M.A. (2017). Using geographic information science to evaluate legal restrictions on freight transportation routing in disruptive scenarios. *International Journal of Critical Infrastructure Protection*, 17, 60-74.
- 25. Nugent, P.J., <u>Olufemi A. Omitaomu</u>, Parish, E.S., Mei, R., Ernst, K.M., Absar, M., and *Sylvester, L. (2017) A Web-Based Geographic Information Platform to Support Urban Adaptation to Climate Change. *Advances in Geocomputation*, pp 371-381.
- 26. *Chapin, F., <u>Olufemi A. Omitaomu</u>, and Bhaduri, B.L. (2017). Making Roads Safer: Optimizing De-icing Using Snowmelt Rates and Slope Data. Proceedings of the 2nd World Congress on Civil, Structural, and Environmental Engineering (CSEE'17), Barcelona, Spain, April 2-4.
- 27. *Marc R. Fialkoff and <u>Olufemi A. Omitaomu</u> (2016). The Jones Act and its Effect on Freight Transportation in the Aftermath of Disruptive Events: A GIS Perspective. The CIP Report, Nov.
- Yuan, J., Yang, H.H.L., <u>Olufemi A. Omitaomu</u>, and Bhaduri, B.L. (2016). Large-scale solar panel mapping from aerial images using deep convolutional networks. IEEE International Conference on Big Data, 2703-2708.
- Olufemi A. Omitaomu, Parish, E.S., Nugent, P.J. (2016). A Decision Analysis Tool for Climate Impacts, Adaptations, and Vulnerabilities. *Proceedings of the Industrial and Systems Engineering Research Conference*. May. <u>Won the 2016 Best Track Paper</u> <u>Award in Modeling and Simulation</u>.
- R. Jafari-Marandi, M. Hu, and <u>Olufemi A. Omitaomu</u> (2016). A distributed decision framework for building clusters with different heterogeneity settings. *Applied Energy*, 165: 393-404.
- 31. <u>Olufemi A. Omitaomu</u>, Alex Sorokine, and Varun Chandola (2015). Virtualization of the Evolving Power Grid. *IEEE Smart Grid Newsletter Compendium 2015 – Smart Grid: The Next Decade*, September, <u>(1 of 32 (out of some 215 articles)</u> "best of the best" insightful articles from the IEEE Smart Grid Newsletter).
- 32. <u>Olufemi A. Omitaomu</u>, Xueping Li, and Shengchao Zhou (2015). Optimization Based Data Mining Approach for Forecasting Energy Demand. *Proceedings of the 2015 Industrial and Systems Engineering Research Conference*, May 30-June2, Nashville, Tennessee, USA (Won the 2015 ISERC Best Track Paper Award in Modeling and <u>Simulation</u>).
- 33. C. Tao, Y. Ge., Q. Song, Y. Ge, and <u>Olufemi A. Omitaomu</u> (2014). Metric Ranking of Invariant Networks with Belief Propagation. 2014 IEEE International Conference on Data Mining (ICDM 2014), 1001-1006.
- 34. <u>Olufemi A. Omitaomu</u> (2014). Agent-Based Modeling of Power Plants Placement to Evaluate the Clean Energy Standard Goal. *Proceedings of the 2014 Industrial and Systems Engineering Research Conference*, May 31-June 3, Montreal, Canada.

- 35. <u>Olufemi A. Omitaomu</u> (2014). A Control Chart Approach for Representing and Mining Data Streams with Shape Based Similarity. *Proceedings of the 2014 Industrial and Systems Engineering Research Conference*, May 18-22, Montreal, Canada.
- 36. Behailu B. Bekera, Royce A. Francis, and <u>Olufemi A. Omitaomu</u> (2014). Drought Risk Modeling for Thermoelectric Power Plants Siting using an Excess over Threshold Approach. *International Journal of System of Systems Engineering*, 5(1), 25-44.
- Olufemi A. Omitaomu (2013). Profiling Real-Time Electricity Consumption Data for Process Monitoring and Control. *Proceedings of the 2013 Industrial and Systems Engineering Research Conference*, May 18-22, San Juan, Puerto Rico, USA.
- 38. <u>Olufemi A. Omitaomu</u>, Cheng Liu, Mustafa S. Cetiner, Randy Belles, Gary T. Mays, and Mark A. Tuttle (2013). Identifying Potential Areas for Siting Interim Nuclear Waste Facilities Using Map Algebra and Optimization Approaches. *Proceedings of the 2013 Industrial and Systems Engineering Research Conference*, May 18-22, San Juan, Puerto Rico, USA.
- *Jeffrey B. Kodysh, <u>Olufemi A. Omitaomu</u>, Budhendra L. Bhaduri, and *Bradley S. Neish (2013). Methodology for Estimating Solar Potential on Multiple Building Rooftops for Photovoltaic Systems, *Sustainable Cities and Society*, 8, 31-41.
- 40. Alan M. Barker, Eva B. Freer, <u>Olufemi A. Omitaomu</u>, Steven J. Fernandez, Supriya Chinthavali, *Jeffrey B. Kodysh (2013). Automating Natural Disaster Impact Analysis: An Open Resource to Visually Estimate a Hurricane's Impact on the Electric Grid. *Proceedings of IEEE Southeast Conference*, April 4-7, Jacksonville, Florida, USA.
- 41. <u>Olufemi A. Omitaomu</u>, Budhendra L. Bhaduri, *Christopher S. Maness, *Jeffrey B. Kodysh, and Amanda M. Noranzyk (2012). CoNNECT: Data Analytics for Energy Efficient Communities. *Proceedings of 2012 ASME International Mechanical Engineering Congress and Exposition*, November 9-15, Houston, Texas, USA.
- 42. <u>Olufemi A. Omitaomu</u>, *Jeffrey B. Kodysh, and Budhendra L. Bhaduri (2012). Modeling and Analysis of Solar Radiation Potentials on Building Rooftops. *Proceedings* of 2012 ASME International Mechanical Engineering Congress and Exposition, November 9-15, Houston, Texas, USA.
- 43. <u>Olufemi A. Omitaomu</u>, Kyle L. Spafford, and Steven J. Fernandez (2012). A GPUbased Real-time Event Detection Framework for Power System Frequency Data Streams. *Proceedings for Modeling, Simulation and Optimization for the 21st Century Electric Power Grid*. October 21-25, Lake Geneva, Wisconsin, USA.
- 44. Mohammed M. Olama, Kyle L. Spafford, <u>Olufemi A. Omitaomu</u>, Supriya Chinthavali, and Steven J. Fernandez (2012). High Performance Computing for Real-time Detection of Large Scale Power Grid Disruptions. *Proceedings for Modeling, Simulation and Optimization for the 21st Century Electric Power Grid*. October 21-25, Lake Geneva, Wisconsin, USA.
- 45. <u>Olufemi A. Omitaomu</u>, *Christopher S. Maness, *Ian S. Kramer, *Jeffrey B. Kodysh, Budhendra L. Bhaduri, Chad A. Steed, Rajasekar Karthik, Philip J. Nugent, and Aaron T. Myers (2012). An Integrated Geovisual Analytics Framework for Analysis of Energy Consumption Data and Renewable Energy Potentials. *Proceedings of the Seventh International Conference on Geographic Information Science (GIScience 2012)*, September 18-21, Columbus, Ohio, USA.
- 46. <u>Olufemi A. Omitaomu</u>, Alex Sorokine, and Varun Chandola (2012). Virtualization of the Evolving Power Grid. *IEEE Smart Grid Newsletter*, June.

- 47. <u>Olufemi A. Omitaomu</u>, *B.R. Blevins, W.C. Jochem, G.T. Mays, R. Belles, T.J. Harrison, B.L. Bhaduri, *B.S. Neish, and A.N. Rose (2012). Adapting a GIS-Based Multi-criteria Decision Analysis Approach for Evaluating New Power Generating Sites. *Applied Energy*, **96**, 292-301.
- 48. Olufemi A. Omitaomu and Adedeji B. Badiru (2012). An Economic Evaluation Framework for Assessing Renewable Energy Projects. *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*, May 19-23, Orlando, Florida, USA.
- 49. <u>Olufemi A. Omitaomu</u>, Budhendra L. Bhaduri, and *Jeffrey B. Kodysh (2012). Prediction of Solar Radiation on Building Rooftop: A Data-Mining Approach. *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*, May 19-23, Orlando, Florida, USA.
- 50. Xueping Li and <u>Olufemi A. Omitaomu</u> (2012). Optimal Design of Solar PV Array for Distributed Generation. *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*, May 19-23, Orlando, Florida, USA.
- <u>Olufemi A. Omitaomu</u>, Vladimir A. Protopopescu, and Auroop R. Ganguly (2011). Empirical Mode Decomposition Technique with Conditional Mutual Information for Denoising Operational Sensor Data. *IEEE Sensors Journal*, 11(10): 2565-2575.
- 52. Young-Seon Jeong, Myong K. Jeong, and <u>Olufemi A. Omitaomu</u> (2011). Weighted Dynamic Time Warping for Time Series Classification. *Pattern Recognition*, **44(9)**: 2231-2240.
- 53. Gary T. Mays, Randy Belles, and <u>Olufemi A. Omitaomu</u> (2011). A Geographic Information System-Based Tool for Evaluating Siting Options. *International High-Level Radioactive Waste Management Conference*.
- 54. <u>Olufemi A. Omitaomu</u> and Steven J. Fernandez (2011). Data Product for Situational Awareness of the Electric Grid System. *Proceedings of the AFIT-AFRL Product Development Research Symposium*.
- 55. Yu Huang, Xueping Li, and <u>Olufemi A. Omitaomu</u> (2011). Conceptual SuperNetwork Model for Coordination Mechanisms in Humanitarian Relief Chain. *Proceedings of the Institute of Industrial Engineers Research Conference*, Reno, Nevada, May 21-25, 2011.
- 56. <u>Olufemi A. Omitaomu</u>, Myong K. Jeong, and Adedeji B. Badiru (2011). On-line Support Vector Regression with Varying Parameters for Time-Dependent Data. *IEEE Transactions on Systems, Man, and Cybernetics: Part A Systems and Humans,* **41(1)**: 191-197.
- 57. Yi Fang, <u>Olufemi A. Omitaomu</u>, and Auroop R. Ganguly (2010). Incremental Anomaly Detection Approach for Characterizing Unusual Profiles. *Knowledge Discovery from Sensor Data Series*, LNCS 5840: 190-202.
- 58. Steven J. Fernandez, Amy N. Rose, Edward A. Bright, Justin M. Beaver, Christopher T. Symons, and <u>Olufemi A. Omitaomu</u> (2010). Construction of Synthetic Populations with Key Attributes: Simulation Set-up while Accommodating Multiple Approaches within a Flexible Simulation Platform. *IEEE Second International Conference on Social Computing* (SocialCom), 701-706.
- 59. *Jason N. Bank, <u>Olufemi A. Omitaomu</u>, Steven J. Fernandez, and Yilu Liu (2009). Visualization and Classification of Power System Frequency Data Streams. *IEEE International Conference on Data Mining Workshop*, 650 – 655, Dec. 6.

- 60. *Jason N. Bank, <u>Olufemi A. Omitaomu</u>, Steven J. Fernandez, and Yilu Liu (2009). Extraction and Visualization of Power System Inter-area Oscillatory Modes. *IEEE Power* & *Energy Society Annual Meeting*, Minneapolis, Minnesota, July 25 – 29.
- 61. <u>Olufemi A. Omitaomu</u>, Auroop R. Ganguly, Bruce W. Patton, and Vladimir A. Protopopescu (2009). Anomaly Detection in Radiation Sensor Data with Application to Transportation Security. *IEEE Transactions on Intelligent Transportation Systems*, **10(2)**: 324-334.
- 62. Auroop R. Ganguly, <u>Olufemi A. Omitaomu</u>, and Yu Jiao (2009). Information-Theoretic Approaches for Evaluating Complex Adaptive Social Simulation Systems. *Proceedings of the Human Behavior-Computational Intelligence Modeling Conference*, Oak Ridge, TN, June 23 24.
- 63. Steven J. Fernandez, Amy N. Rose, Edward A. Bright, and <u>Olufemi A. Omitaomu</u> (2009). LandScan Data Sets for Automating Simulation Set-up while Accommodating Multiple Approaches within a Flexible Simulation Platform. *Proceedings of the Human Behavior-Computational Intelligence Modeling Conference*, Oak Ridge, TN, June 23 24.
- 64. <u>Olufemi A. Omitaomu</u>, Yi Fang, and Auroop R. Ganguly (2008). Anomaly Detection from Sensor Data for Real-time Decisions. *Proceedings of the 2nd International Workshop on Knowledge Discovery from Sensor Data* (SensorKDD-2008) held in conjunction with the 14th International Conference on Knowledge Discovery and Data Mining (KDD 2008), Las Vegas, NV, August 24 – 27.
- 65. Ranga Raju Vatsavai, <u>Olufemi A. Omitaomu</u>, Joao Gama, Nitesh V. Chawla, Mohamed M. Gaber, and Auroop R. Ganguly [Editors] (2008). *Workshop Proceedings, Second International Conference on Knowledge Discovery from Sensor Data (SensorKDD'08)*, the Fourteenth International Conference on Knowledge Discovery and Data Mining (KDD 2008), Las Vegas, NV, August.
- 66. <u>Olufemi A. Omitaomu</u>, Myong K. Jeong, Adedeji B. Badiru, and J. Wesley Hines (2007). On-Line Support Vector Regression Approach for the Monitoring of Motor Shaft Misalignment and Feedwater Flow Rate. *IEEE Transactions on Systems, Man, and Cybernetics: Part C – Applications and Reviews*, **37(5)**: 962-970.
- 67. Yongjin Kwon, <u>Olufemi A. Omitaomu</u>, and Gi-Nam Wang (2007). Data Mining Approaches to Modeling Complex Electronic Circuit Design Activities. *Journal of Computers and Industrial Engineering*, **54**: 229 241.
- 68. <u>Olufemi A. Omitaomu</u> and Adedeji B. Badiru (2007). Fuzzy Present Value Analysis Model for Evaluating Information System Projects. *The Engineering Economist*, **52(2)**: 157-178.
- 69. Seong-Hoon Cho, <u>Olufemi A. Omitaomu</u>, Neelam Poudyal, and David B. Eastwood (2007). The Impact of an Urban Growth Boundary on Land Development in Knox County, Tennessee: A Comparison of Two-Stage Probit Least Squares and Multilayer Neural Network Models. *Journal of Agricultural and Applied Economics*, **39(3)**: 701-717.
- 70. Auroop R. Ganguly, Joao Gama, <u>Olufemi A. Omitaomu</u>, Mohamed M. Gaber, and Ranga Raju Vatsavai [Editors] (2007). Workshop Proceedings, First International Conference on Knowledge Discovery from Sensor Data (SensorKDD'07), the Thirteenth International Conference on Knowledge Discovery and Data Mining (KDD 2007), San Jose, CA, August.

- 71. <u>Olufemi A. Omitaomu</u>, Myong K. Jeong, Adedeji B. Badiru, and J. Wesley Hines (2006). On-line Prediction of Motor Shaft Misalignment Using Fourier-Transformed Power Spectrum Data and Support Vector Regression. *ASME Transactions, Journal of Manufacturing Science and Engineering*, **128(4)**: 1019-1024.
- 72. Adedeji B. Badiru, Sunday O. Asaolu, and <u>Olufemi A. Omitaomu</u> (2006). Eyewitness Information Management System Using NeuroFuzzy Classification Schemes. *Journal of Information Science and Technology*, 2(3): 49-64.
- 73. Yongjin Kwon, Myong K. Jeong, and <u>Olufemi A. Omitaomu</u> (2006). Adaptive Support Vector Regression Analysis of Closed-Loop Inspection Accuracy. *Journal of Machine Tools and Manufacture*, 46(6): 603-610.
- 74. <u>Olufemi A. Omitaomu</u>, Levi D. Smith, and Adedeji B. Badiru (2005). The ENGINeering Economic Analysis (ENGINEA) Software: Enhancing Teaching and Application of Economic Analysis Techniques. *ASEE Computers in Education Journal*, **15(4):** 32-38.
- 75. <u>Olufemi A. Omitaomu</u> and Adedeji B. Badiru (2004). Incorporation of Information Systems Economics into Engineering Economic Analysis Courses. *Proceedings of the 2004 ASEE Annual Conference and Exposition, Engineering Education Researches New Heights*, 2004, pp. 7177-7182.
- 76. Badiru, Adedeji B. and <u>Olufemi A. Omitaomu</u> (2003). Design and Analysis of Tent Cash Flow Models for Engineering Economy Lectures. *The Engineering Economist*, 48(4): 363-374.

Conference Presentations

- 77. <u>Olufemi A. Omitaomu</u> (2013). Profiling Real-Time Electricity Consumption Data for Process Monitoring and Control. *Presented at the 2013 Industrial and Systems Engineering Research Conference*, May 18-22, San Juan, Puerto Rico, USA.
- 78. <u>Olufemi A. Omitaomu</u> (2013). Identifying Potential Areas for Siting Interim Nuclear Waste Facilities Using Map Algebra and Optimization Approaches. *Presented at the* 2013 Industrial and Systems Engineering Research Conference, May 18-22, San Juan, Puerto Rico, USA.
- 79. *Jeffrey B. Kodysh and <u>Olufemi A. Omitaomu</u> (2013). Geospatially Profiling Smart Meter Data Energy Consumption Patterns. *Presented at the 2013 Annual Conference of the Association of American Geographers*, Los Angeles, California, USA, April 9-13, 2013.
- Budhendra L. Bhaduri, <u>Olufemi A. Omitaomu</u>, *Ian S. Kramer, and *Jeffrey B. Kodysh (2012). CoNNECT: A Computational Framework for Energy Efficient Communities. *Presented at the 2012 Annual Conference of the Association of American Geographers*, New York City, New York, USA, February 2012.
- 81. *Ian S. Kramer, <u>Olufemi A. Omitaomu</u>, and Budhendra L. Bhaduri (2012). SpatialNet: GeoAgent-based Architecture for automated Real-time Analysis and Dissemination. *Presented at the 2012 Annual Conference of the Association of American Geographers*, New York City, New York, USA, February 2012.
- 82. *Jeffrey B. Kodysh and <u>Olufemi A. Omitaomu</u> (2012). Visual-SOLAR: Modeling Solar Energy Potential for Distributed Generation. *Presented at the 2012 Annual Conference of the Association of American Geographers*, New York City, New York, USA, February 2012.

- 83. *Bradley S. Neish and <u>Olufemi A. Omitaomu</u> (2012). Power Generation Plant Placement Algorithm and Visualization Tool. *Presented at the 2012 Annual Conference of the Association of American Geographers*, New York City, New York, USA, February 2012.
- 84. Richard M. Medina and <u>Olufemi A. Omitaomu</u> (2011). The Complex Geography of Terrorism in Nigeria. *Presented at the 2011 Annual Conference of the Association of American Geographers*, Seattle, Washington, USA, April 12-16, 2011.
- 85. <u>Olufemi A. Omitaomu</u>, Randy Belles, Stanton W. Hadley, Gary T. Mays, and *Brandon R. Blevins (2011). Spatial Modeling and Site Suitability Assessment for Compressed Air Energy Storage. *Presented at the 2011 Annual Conference of the Association of American Geographers*, Seattle, Washington, USA, April 12-16, 2011.
- *Jeffrey B. Kodysh and <u>Olufemi A. Omitaomu</u> (2011). A GIS-based Methodology for Assessing Rooftop Solar Energy Potential. *Presented at the 2011 Annual Conference of the Association of American Geographers*, Seattle, Washington, USA, April 12-16, 2011.
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- 91. <u>Olufemi A. Omitaomu</u> (2008). A Parallel Disintegrated Model for Uncertainty Analysis in Estimating Electrical Power Outage Areas. *Presented at the 2008 AGU Session on Impacts of Severe Weather on Environment, Economy, and Society* (Abstract #: U41A-02), Fort Lauderdale, FL, May 27 – 30.
- 92. Raju Vatsavai, Auroop R. Ganguly, <u>Olufemi A. Omitaomu</u>, and Budhendra L. Bhaduri (2008). Geospatial-temporal Data Mining for Infrastructure under Stress from Severe Weather Events. *Presented at the 2008 AGU Session on Impacts of Severe Weather on Environment, Economy, and Society* (Abstract #: U41A-01), Fort Lauderdale, FL, May 27 30.
- 93. Randy M. Walker, <u>Olufemi A. Omitaomu</u>, Auroop R. Ganguly, R.K. Abercrombie, and F.T. Sheldon (2008). Multimodal Integrated Safety, Security, and Environmental Program Strategy, *Presented at the 87th Annual Meeting of the Transportation Research Board*, January 2008, Washington, DC, 08-2644.
- 94. Auroop R. Ganguly, <u>Olufemi A. Omitaomu</u>, Vladimir Protopopescu, Bruce Patton, Randy Walker, Yi Fang, Amrudin Agovic, and Arindam Banerjee (2007). *Anomaly Detection from Heterogeneous Sensor Data with Application to Transportation Security, Presented at the 2007 National Rural Intelligent Transportation Systems Conference*, Oct. 7-10, Traverse City, Michigan.

- 95. Adedeji B. Badiru, <u>Olufemi A. Omitaomu</u>, Godswill Nsofor, and Lynn A. York (2005). Concept of Program Management: Product Assurance of Command and Control Processes. *Presented at the 10th International Command and Control Research and Technology Symposium (CCRTS): The Future of C2*. McLean, VA. June 13-16.
- 96. <u>Olufemi A. Omitaomu</u>, Myong K. Jeong, Adedeji B. Badiru, and J. Wesley Hines (2005). A support vector regression approach to machinery misalignment prediction using high-dimensional power spectrum data. *Presented at the 2005 Maintenance and Reliability Conference (MARCON 2005)*, Gatlinburg, Tennessee, May 3-6.
- 97. <u>Olufemi A. Omitaomu</u>, Levi D. Smith, and Adedeji B. Badiru (2005). The Design and Development of ENGINeering Economic Analysis (ENGINEA) Software. *Presented at the 2005 Industrial Engineering Research Conference (IERC)*, Atlanta, Georgia, May.
- 98. <u>Olufemi A. Omitaomu</u>, Myong K. Jeong, Adedeji B. Badiru, and J. Wesley Hines (2005). Motor Shaft Alignment Prediction Using On-line Support Vector Regression. *Presented at the 2005 INFORMS Annual Meeting*, November 13-16, San Francisco, California.
- 99. <u>Olufemi A. Omitaomu</u>, C. Godswill Nsofor, and Adedeji B. Badiru (2004). Integrative Present Value Analysis Model for Evaluating Information System Projects. *Presented at the 2004 Industrial Engineering Research Conference (IERC)*, Houston, Texas, May.
- 100. Adedeji B. Badiru, Vincent Delgado, Jamie Ehresman-Gunter, <u>Olufemi A. Omitaomu</u>, Godswill Nsofor, Sirisha Saripalli (2004). Graphical and Analytical Methodology for Cost Benchmarking for New Construction Projects. *Presented at the 13th International Conference on Management of Technology (IAMOT)*, Washington, DC, April 3-7.
- 101. Badiru, A.B. and <u>Olufemi A. Omitaomu</u> (2003). Tent Cash Flow Designs and Analysis for Gradient Cash Flow Lectures. *Presented at the 2003 ASEE Annual Conference and Exposition: Staying in Tune with Engineering Education*, 2003, pp. 3427-3441.
- 102. Badiru, A.B. and <u>Olufemi A. Omitaomu</u> (2003). Integrative Learning and Forgetting Models for Quality and Productivity Improvement Analysis. *Presented at the 2003 INFORMS Annual Meeting*, Atlanta, Georgia, October.
- 103. Badiru, A.B., Don McDaniel, and <u>Olufemi A. Omitaomu</u> (2003). An Integrative Study of Factors of Industrial Development in East Tennessee. Presented at the 31st International Conference on Computers and Industrial Engineering, San Francisco, California, February.
- 104. Badiru, A.B. and <u>Olufemi A. Omitaomu</u> (2002). Application of Data Mining to Maintenance Management Systems. Presented at the 6th Africa-USA International Conference in Manufacturing Technology, Abuja, Nigeria, May.
- 105. Badiru, A.B., <u>Olufemi A. Omitaomu</u>, and F.B. Odunayo (2001). Design of a Matrix Knowledge Base Framework for Plant Maintenance Planning and Control. *Presented at the 2001 Maintenance and Reliability Conference*, Gatlinburg, Tennessee, May.

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106. April Morton, <u>Olufemi A. Omitaomu</u>, Susan Kotikot, Elizabeth Held, and Budhendra L. Bhaduri (2018). "Evaluation of Factors that Influence Residential Solar Panel Installations" ORNL/TM-2018/780.

- 107. Sylvester, L.M., <u>Olufemi A. Omitaomu</u>, and E.S. Parish (2016) "Analyzing the Implications of Climate Data on the Rainfall Frequency Spectrum: Case Study of Knoxville, Tennessee and Surrounding Region" ORNL/TM-2016/485.
- Sylvester, L.M., <u>Olufemi A. Omitaomu</u>, E.S. Parish, and M.R. Allen (2016)
 "Processing and Monthly Summaries of Downscaled Climate Data for Knoxville, Tennessee and Surrounding Region" ORNL/TM-2016/486.
- Sylvester, L.M., <u>Olufemi A. Omitaomu</u>, and E.S. Parish (2016) "Analyzing the Implications of Climate Data on Plant Hardiness Zones for Green Infrastructure Planning: Case Study of Knoxville, Tennessee and Surrounding Region" ORNL/TM-2016/322.
- 110. Randy Belles and <u>Olufemi A. Omitaomu</u> (2014). Population Sensitivity Evaluation of Two Proposed Hampton Roads Area Sites for a Possible Small Modular Reactor. Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2014/300.
- 111. Randy Belles and <u>Olufemi A. Omitaomu</u> (2014). Evaluation of Possible Small Modular Reactor Sites near Federal Energy Clusters to Support Federal Clean Energy Goals. Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2014/433.
- 112. Randy Belles, Thomas J. Harrison, and <u>Olufemi A. Omitaomu</u> (2014). Evaluation of Proposed Hampton Roads Area Sites for Using Small Modular Reactors to Support Federal Clean Energy Goals. *Oak Ridge National Laboratory Technical Manual ID: ORNL/LTR-2014/155*.
- 113. Randy Belles, Gary T. Mays, <u>Olufemi A. Omitaomu</u>, and Willis P. Poore III (2013). Identification of Selected Areas to Support Federal Clean Energy Goals using Small Modular Reactors. *Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-*2013/578.
- 114. Gary T. Mays, Randy Belles, <u>Olufemi A. Omitaomu</u>, and Mike Poore (2013). Geographic Information Systems (GIS) Evaluation of Sample Department of Defense Military Bases and Department of Energy Sites to be powered with Small Modular Reactors. Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2013/118.
- 115. Gary T. Mays, Randy Belles, <u>Olufemi A. Omitaomu</u>, and Mike Poore (2013). Geographic Information Systems (GIS) Evaluation of Sample Coal Plant Sites to be repowered with Small Modular Reactors. *Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2013/109*.
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- 117. Gary T. Mays, Randy Belles, <u>Olufemi A. Omitaomu</u>, and others (2011). Application of Spatial Data Modeling and Geographical Information Systems (GIS) for Identification of Potential Siting Options for Various Electrical Generation Sources. *Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2011/157*.
- 118. Gary T. Mays, Thomas J. Harrison, and <u>Olufemi A. Omitaomu</u> (2010). Preliminary Report on Siting Evaluation Tool for Commercial Nuclear Power Plants. *Developed by Oak Ridge National Laboratory*, LTR/DOE-NE/Siting-2010/002, November.
- 119. <u>Olufemi A. Omitaomu</u> (2010). A GIS Approach for Modeling the Potential Siting Options for Compressed Air Energy Storage. *Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2010/224*.

- 120. Jason N. Bank and <u>Olufemi A. Omitaomu</u> (2009). Development of an Inter-area Modal Extraction and Visualization Procedure for Power Systems Using Phasor Measurement Data. Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2009/323.
- 121. Ganguly, A.R., Whitmeyer, J.M., <u>Olufemi A. Omitaomu</u>, Hadzikadic, M., Gilman, P., Brecke, P.K., Khouja, M.J., Fernandez, S.J., Eichelberger, C.N., McLean, A.L., Yu, J., Middleton, E.J., Carmichael, T.D., Saric, A. and M. Sun (2008). Towards a characterization and systematic evaluation framework for theories and models of human, societal, behavioral, and cultural processes. *Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2008/062*.
- 122. <u>Olufemi A. Omitaomu</u> and Auroop R. Ganguly (2006). Statistical Methods and Wavelet-Based Approaches for Analyzing Truck Radiation Data. *Oak Ridge National Laboratory Technical Manual ID: ORNL/TM-2006/596*.

Issued Patent

• <u>Olufemi A. Omitaomu</u> and Steven Fernandez, *Method for Estimating Power Outages and Restoration during Natural and Man-made Events*, US Patent 9,230,289, January 5, 2016.

Certificate of Registration

- September 2015: <u>Visual-SOLAR: Modeling and Visualization of Solar Potential on</u> <u>Individual Building Rooftops (TXu 2-001-550)</u>.
- March 2013: CoNNECT: Citizen Engagement for Energy Efficient Communities (TX 7-<u>699-427)</u>.
- February 2013: <u>GPU Accelerated Event Detection Algorithm (GAEDA) Software (TXu</u> <u>1-852-650)</u>.

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• <u>Olufemi A. Omitaomu</u> and Steven Fernandez. VERDE Analytic Modules (UT-Battelle Case No: 50000014).

Invention Disclosures

- 1. Sreenivas R. Sukumar, Supriya Chinthavali, <u>Olufemi A. Omitaomu</u>, Matt Lee. Predicting Propagation Consequences of Perturbations in Synergistically-Interacting Infrastructure Networks (201603622 DOE S-138,261).
- 2. Budhendra L. Bhaduri and <u>Olufemi A. Omitaomu</u>. Smart Snow Removal Analysis (201503595, DOE S-138,232)
- 3. <u>Olufemi A. Omitaomu</u>, Esther Parish, and Phil Nugent. Urban-CAT: Integrated Framework for Urban Climate Adaptation Tool (201503477, DOE S-138,108).
- 4. <u>Olufemi A. Omitaomu</u> and Budhendra L. Bhaduri. CoNNECT Citizen Engagement for Energy Efficient Communities.
- 5. Fernandez, S.J., <u>Olufemi A. Omitaomu</u>, and others. Real-Time Simulation of Power Grid Disruptions (DOE S-NUMBER: S-124,011)
- 6. Ganguly, A. R. and <u>Olufemi A. Omitaomu</u>. Anomaly Detection and Risk Assessment Tool for Security Decisions (DOE S-NUMBER: S-115,121).

Professional Services

- *Program Committee Member*, 1st International Workshop on Data-intensive Process Management in Large-Scale Sensor Systems (DPMSS 2012): From Sensor Networks to Sensor Clouds at the 12th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing, May 13-16, 2012.
- Session Organizer and Chair Distributed Renewable Generation at the 2012 Industrial and Systems Engineering Research Conference, May 19-23, 2012.
- *Program Committee Member*, First International Workshop on Analytics for Cyber-Physical Systems at the 2012 International Conference on Data Mining, April 26-28, 2012.
- Session Organizer and Chair Energy Mapping and Modeling 2012 Annual Conference of the Association of American Geographers, New York City, New York, Feb 2012.
- Session Chair Energy Mapping and Modeling 2011 Annual Conference of the Association of American Geographers, Seattle, Washington, April 12-16, 2011.
- Workshop Co-Organizer and Lead-Chair, Fourth International Workshop on Knowledge Discovery from Sensor Data (SensorKDD-2010) at the 16th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, July 25 – 28, 2010.
- *Workshop Co-Organizer and Lead-Chair*, Third International Workshop on Knowledge Discovery from Sensor Data (SensorKDD-2009) at the 15th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, June 28 July 1, 2009.
- Program Committee Member First International Workshop on Data Warehousing and Knowledge Discovery from Sensors and Streams at the 5th International Conference on Distributed Computing in Sensor Systems (DCOSS 2009), June 8 – 10, 2009.
- *Workshop Co-Organizer and Co-Chair*, Second International Workshop on Knowledge Discovery from Sensor Data (SensorKDD-2008) at the 14th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, August 24-27, 2008.
- *Workshop Co-Organizer and Co-Chair*, First International Workshop on Knowledge Discovery from Sensor Data (SensorKDD-2007) at the 13th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, August 12-15, 2007.
- *Workshop Program Committee Member*, International Workshop on Knowledge Discovery from Ubiquitous Data Streams at the 18th European Conference on Machine Learning (ECML) and the 11th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD), September 17-21, 2007.
- Conference Session Co-Organizer and Co-Chair, Software Tools for Engineering Economic Analysis Session at the Institute of Industrial Engineers Annual Research Conference, Atlanta, Georgia, May 14-18, 2005.
- *Board Member*, Engineering Economy Division, Institute of Industrial Engineers, elected, May 2002 May 2006.

Invited Peer Reviewer Services (Current and Past)

- Applied Energy
- Infrastructures
- Applied Intelligence
- Journal of Homeland Security and Emergency
- IEEE Transactions on Systems, Man and Cybernetics: Systems

- IEEE Transactions on Sustainable Energy
- Sustainability
- Energies
- Water
- Risk Analysis
- The Engineering Economist
- Advances in Building Energy Research
- Sustainability and Disaster Risk Management
- Knowledge and Information Systems
- International Journal of Disaster Response and Emergency Management
- International Journal of Geo-Information
- Nuclear Engineering and Design
- Transactions on Intelligent Transportation Systems
- Data Mining and Knowledge Discovery
- International Journal of Knowledge and Learning
- International Journal on Multi-Sensor, Multi-Source Information Fusion)
- International Journal of Operations Research and Information Systems (IJORIS)
- IEEE Transactions on Automation Science and Engineering
- ASME Journal of Manufacturing Science and Engineering
- Journal of Computing in Civil Engineering
- DOE Early Career Research Program Review Panel, 2011.
- DOE ASCR SBIR Review, 2010.
- Journal of Optimization Methods and Software
- IEEE Smart Grid Communication
- American Society for Engineering Education Conference
- Soft Computing Journal
- Sensors

Professional Membership

- Institute of Industrial and Systems Engineers (IISE)
- Institute of Electrical and Electronic Engineers (IEEE)
- Institute for Operations Research and the Management Sciences (INFORMS)

Mentees in Non-Staff Positions

Ph.D. Committee Member

- Marc Fialkoff (Ph.D. Advisor: Rob Buehler)
 Department of Urban Affairs & Planning
 Virginia Polytechnic Institute and State University
- Behailu B. Bekera (Ph.D. Advisor: Royce Francis)
 Department of Engineering Management and Systems Engineering
 George Washington University
- Jason N. Bank (Ph.D. Advisor: Yilu Lu)
 Department of Electrical Engineering
 Virginia Polytechnic Institute and State University

Post-Doc Research Associate

- Dr. Melissa R. Allen (January 2015 December 2016)
 Ph.D. Energy Science and Engineering, University of Tennessee, Knoxville.
- Graduate Research Associates
 - Susan Kotikot (June 2017 Date)
 M.S. Earth System Science (University of Alabama at Huntsville)
 - Parul Kaushal (January 2017 Date)
 M.S. Electrical Engineering (University of Tennessee)
 - Linda Sylvester (January 2015 October 2017)
 M.S. Earth Science (Purdue University)
 - Thomaz M. Carvalhaes (May 2014 May 2017)
 B.S. in Environmental Science (University of Michigan, Dearborn
 - Jeffrey B. Kodysh (May 30, 2011 to May 2013)
 B.A. Geography (University of Toledo)
 - Brandon Blevins (November 2010 July 15, 2011)
 B.A. Environmental Science (University of Tennessee)

Student Interns

- o Graduate Students
 - Parul Kaushal (August 2016 Dec 2016)
 M.S. Student (Electrical Engineering, University of Tennessee, Knoxville)
 - Marc R. Fialkoff, JD (June August 2015; January December 2016)
 Ph.D. Student, Urban Affairs and Planning, Virginia Tech
 - Hakeem Jones (June August 2015)
 Ph.D. Student, Computer Science, Clemson University
 - Behailu B. Bekera (June August 2014)
 Ph.D. Student, Systems Engineering, The George Washington University
 - Jason Bank (June December 2009)
 Ph.D. Student, Electrical Engineering, Virginia Tech.
 - Christopher Ian Lanclos (May August 2012)
 - Ph.D. Student, Computer Science, Norfold State University
- Undergraduate Students
 - Angela Burke (June August 2017) Earth System Science, University of Alabama at Huntsville
 - Jeb Gary (June August 2017) Mechanical Engineering, Clemson University
 - Connor Bihlmeyer (June August 2017) Mechanical Engineering, University of Tennessee
 - Adam Sisco (September December 2016 University of Alabama at Huntsville
 - Fletcher Chapin (June August 2016) Environmental Engineering, Cornell University
 - Sang Jun Park (June August 2016) Computer Science, Columbia University
 - Dallas Hamlin (June August 2016)
 Electrical Engineering, University of Tennessee, Knoxville
 - Grant T. Powell (June August 2015)

Industrial and Systems Engineering, University of Tennessee, Knoxville

- David T. Herberich (June August 2015) Industrial and Systems Engineering, University of Tennessee, Knoxville
- David Lu (June August 2014) Computer Science, University of Tennessee, Knoxville
- Amy Albaugh (June August 2014) Energy Science and Engineering, University of Tennessee, Knoxville
- Daniel Noteboom (June August 2013)
 Computer Science and Engineering, University of Washington.
- Christopher Scott Maness (October 2011 May 2012) Computer Science, East Tennessee State University.
- Amanda Noranzyk (June August 2011) Mechanical Engineering, Clemson University, South Carolina.
- Jeffrey B. Kodysh (June August 2010; January May 2011) Geography, University of Toledo, Ohio. Jeff's research during this period was awarded 3rd Place in the Energy Category at the 2010 DOE's Science and Energy Research (SERCh) Competition at Argonne National Laboratory, Chicago on November 15, 2010.
- Cornelius M. Singleton, Jr (June August 2010) Computer Science, South Carolina State University.