

CURRICULUM VITAE

Yong Chen

Department of Industrial and Systems Engineering
The University of Iowa
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EDUCATION

- Ph.D.** August 2003, Industrial and Operations Engineering, University of Michigan, Ann Arbor, MI
- M.A.** April 2003, Statistics, University of Michigan, Ann Arbor, MI
- B.E.** July 1998, Computer Science & Engineering, Tsinghua University, Beijing, China

PROFESSIONAL EXPERIENCE

- August, 2016 – present**, Professor, Industrial and Systems Engineering, University of Iowa, Iowa City, IA.
- August, 2010 – August, 2016**, Associate Professor with tenure, Industrial Engineering, University of Iowa, Iowa City, IA.
- August, 2003 – August, 2010**, Assistant Professor, Industrial Engineering, University of Iowa, Iowa City, IA.
- August, 1998 – August, 2003**, Research Assistant, Dept. of Industrial and Operations Engineering, University of Michigan, Ann Arbor, MI

ACADEMIC AWARDS

- Best Paper Award Honorable Mention, IISE Transactions, 2017.
- Recognition by Graduating Seniors, University of Iowa, 2015.
- College of Engineering Service Award, University of Iowa, 2013.
- Recognition of Excellence in Teaching and Dedication to Student Success, University of Iowa College of Engineering, 2013.
- Best Paper Award, IIE Transactions, 2010.
- The RSPS Faculty Award, Center for Computer-Aided Design, University of Iowa, 2005.
- Best Paper Award, IIE Transactions, 2004.
- Outstanding Educator Award, from Institute of Industrial Engineers (IIE) student chapter, The University of Iowa, 2004.

- Rackham Predoctoral Fellowship, University of Michigan, 2003.
- College of Engineering (CoE) Distinguished Achievement Award, University of Michigan, 2002.
- Best Student Paper Award, from Quality, Statistics, and Reliability (QSR) Section of Institute for Operations Research and the Management Sciences (INFORMS), 2001.

TEACHING EXPERIENCE

1. Courses Taught

- Undergraduate required courses at University of Iowa:
Operations Research, Digital Systems Simulation, Data Analytics with R
- Graduate courses at University of Iowa:
Reliability Theory and Applications, Nonlinear Optimization, Statistical Pattern Recognition, Advanced Quality Control
- Taught “Statistical Quality Control” at University of Michigan as the instructor on record for two semesters.

2. Ph. D. Student Advising

1. Qingyu Yang, “Optimal Reliability Modeling of Linear Sensor Systems”. Graduation date: May 2008. Current position: Associate Professor, Dept. of Industrial and Systems Engineering, Wayne State University, MI.
2. Shan Li, “Simultaneous Monitoring of Process and Sensor Faults for Quality Control of Complex Manufacturing Systems”. Graduation date: Dec., 2008. Current position: Data Scientist, Facebook.
3. Andrew Kiekhaefer, “Simulation Ranking and Selection Procedures and Applications in Network Reliability Design”. Graduation date: May, 2011. Current position: Lead Data Scientist, John Deere.
4. Huan Yu, “New Statistical Methods for Simulation Output Analysis”. Graduation date: July, 2013. Current position: Data Scientist, Microsoft.
5. Bo Sun (co-chaired with Prof. Krokhmal), “Energy Supply Chain Reliability Optimization”. Graduation date: December, 2015. Current position: Quantitative Analyst, CitiBank.
6. Yuxing Hou, Starting date: August, 2013, “Applications of Outlier and Change Detection for Longitudinal Data”. Graduation date: May, 2017. Current Position: Predictive Analyst, Ingram Micro.

7. Baosheng He, Starting date: August, 2014. “New Bayesian Methods for Quality Control Applications”. Graduation date: May, 2018. Current Position: Research Scientist, Thomson Reuters.
8. Xudong Zhang, Starting date: January, 2016. “New Functional Depth and Applications”. Graduation date: May, 2020. Current Position: Data Scientist, Vanguard Group.

RESEARCH INTERESTS

Data Science, Industrial Data Analytics, Quality and Reliability Engineering, System Monitoring, Diagnosis, and Prognosis.

RESEARCH GRANTS

Contract/Grant Title	Sponsor	Start Date	End Date	Amount \$	PI/ Co-PI	% Credit	Net Amount \$
Temporal Associations between Caregiver Person-Centered and Task-Centered Mealtime Behaviors and Individual Outcomes using Sequential Analysis	UI	Dec-20	June-22	\$10,000	Co-PI	50%	5,000
Smart Asthma Management: Statistical Modeling, Prognostics and Intervention Decision Making	NSF	Jan-14	Jan-19	\$200,521	PI	100%	200,521
Progressive Fault Identification and Prognosis in Aircraft Structure Based on Dynamic Data Driven Adaptive Sensing and Simulation	AFOSR (sub through UW-Madison)	Sep-14	Mar-18	\$180,304	PI	100%	180,304
Data-Driven Statistical Prognosis and Service Decision Making for Teleservice Systems	NSF	Sep-13	Aug-16	\$150,000	PI	100%	150,000
Modeling, Monitoring, and Analysis of Spatial Point Patterns for Manufacturing Quality Control*	NSF	July-12	June-15	187,469	PI	100%	187,469
Iowa EPSCOR	NSF	2011	2016	-----	Co-I	0.83%	166,455
GOALI/Collaborative Research: Event-Log-Based Failure Prediction and Maintenance Service for After-Sales Engineering Systems	NSF	Sep-08	Aug-13	166,716	PI	100%	166,716
Collaborative Research: Fault Tolerance Analysis and Design of	NSF	Sep-07	Aug-10	181,501	PI	100%	181,501

Contract/Grant Title	Sponsor	Start Date	End Date	Amount \$	PI/ Co-PI	% Credit	Net Amount \$
Clustered Sensor Networks							
Sensor: Reliability of Variation Source Sensor Systems	NSF	Sep-05	Aug-08	199,987	PI	100%	199,987
Customer Behavior Modeling and Prediction for Credit Risk Analysis	Discover Financial Services	Nov-08	Aug-09	60,000	PI	100%	60,000
Quality and Reliability Chain Modeling and Analysis for Multi-Station Sheet Metal Assembly Processes	UI Carver	Jan-04	Dec-04	11,452	PI	100%	11,452

PUBLICATIONS

Book

Zhou, S., & Chen, Y. (2021). *Industrial Data Analytics for Diagnosis and Prognosis: A Random Effects Modelling Approach*. John Wiley & Sons.

Refereed Journals (papers published or accepted)

1. Huang, W., Samanta, A., Chen, Y., Baek, S., Shaw, S. K., & Ding, H. (2021). Machine learning model for understanding laser superhydrophobic surface functionalization. *Journal of Manufacturing Processes*, 69, 491-502.
2. Hou, Y., He, B., Zhang, X., Chen, Y., & Yang, Q. (2020). A new Bayesian scheme for self-starting process mean monitoring. *Quality Technology & Quantitative Management*, 17(6), 661-684.
3. Lee, J., Son, J., Zhou, S., & Chen, Y. (2020). Variation source identification in manufacturing processes using Bayesian approach with sparse variance components prior. *IEEE Transactions on Automation Science and Engineering*, 17(3), 1469-1485.
4. Liu, Y., Zhou, S., Chen, Y., and Tang, J. (2019) Measurements Selection for Bias Reduction in Structural Damage Identification, *Journal of Dynamic Systems, Measurement, and Control*, 141, 031003.
5. Si, W., Yang, Q., Monplaisir, L., and Chen, Y. (2018) Reliability Analysis of Repairable Systems With Incomplete Failure Time Data, *IEEE Transactions on Reliability*, 67(3), 1043-1059.

6. Sun, B., Kokhmal, P. and Chen, Y. (2018) Risk-Averse Capacity Planning for Renewable Energy Production, *Energy Systems*, 1-34.
7. Si, W., Yang, Q., Wu, X., and Chen, Y. (2018) Reliability analysis considering dynamic material local deformation, *Journal of Quality Technology*, 50(2), 183-197.
8. Hou, Y., Wu, J., and Chen, Y. (2016) Online Steady State Detection Based on Rao-Blackwellized Sequential Monte Carlo. *Quality and Reliability Engineering International*, 32(8), 2667-2683.
9. Wu, J., Chen, Y., and Zhou, S., (2016) On-line Steady-state Detection Using Multiple Change-point Models and Exact Bayesian Inference. *IIE Transaction*, 48, 599-613.
10. Das, D., Zhou, S., Chen, Y., Horst, J. (2016) Statistical monitoring of over-dispersed multivariate count data using approximate likelihood ratio tests. *International Journal of Production Research*, 54, 6579-6593.
11. Li, S. and Chen, Y. (2016) A Bayesian Variable Selection Method for Joint Diagnosis of Manufacturing Process and Sensor Faults, *IIE Transactions*, 48(4), 313-323.
12. Das. D., Chen, Y., Zhou, S., and Sievenpiper, C. (2016) Monitoring of Multiple Binary Data Streams Using a Hierarchical Model Structure. *Quality and Reliability Engineering International*, 32(4), 1307-1319.
13. Wu, J., Chen, Y., Zhou, S., and Li, X. (2016) Online Steady State Detection for Process Control Using Multiple Change-point Models and Particle Filters. *IEEE Transactions on Automation Science and Engineering*, 13(2), 688-700.
14. Yang, Q., Hong Y., Chen, Y., and Shi, J. (2012) Failure Profile Analysis of Complex Repairable Systems with Multiple Failure Modes, *IEEE Transactions on Reliability*, vol. 61, 180-191.
15. Cannon, J., Krokhmal, P., Chen, Y., and Murphey, R. (2012) Detection Of Temporal Changes In Psychophysiological Data Using Statistical Process Control Methods, *Computer Methods and Programs in Biomedicine*, vol. 107, 367-381.
16. Yang, Q. and Chen, Y. (2011) Monte Carlo Methods for Reliability Evaluation of Linear Sensor Systems. *IEEE Transactions on Reliability*, vol. 60, pp. 305-314.
17. Chen, N., Chen, Y., Li, Z., Zhou, S., and Sievenpiper, C. (2011) Optimal Variability Sensitive Condition-based Maintenance with Cox PH Model. *International Journal of Production Research*, vol. 49, pp. 2083-2100.
18. Yang, Q., and Chen, Y. (2010) Reliability of Coordinate Sensor Systems Under the Risk of Sensor Precision Degradations. *IEEE Transactions on Automations Science and Engineering*, vol. 7, 291-302.
19. Cho, J. J., Ding, Y., Chen, Y., and Tang, J. (2010) Robust Calibration for Localization in Clustered Wireless Sensor Networks. *IEEE Transactions on Automation Science and Engineering*, vol. 7, 81-95.
20. Cho, J. J., Chen, Y., and Ding, Y. (2009) On the Breakdown Point Condition of Structured Linear Models. *Technometrics*, vol. 51, 34-46.

21. Yang, Q. and Chen, Y. (2009) Sensor System Reliability Modeling and Analysis for Fault Diagnosis in Multistage Manufacturing Processes. *IIE Transactions*, vol. 41, 819-830.
22. Li, S. and Chen, Y. (2009) Sensor Fault Detection for Manufacturing Quality Control. *IIE Transactions*, vol. 41, 605-614.
23. Cho, J. J., Chen, Y., and Ding, Y. (2007) On the (Co)Girth of Connected Matroids, *Discrete Applied Mathematics*, vol. 155, 2456-2470.
24. Warren-Rhodes, K., Rhodes, K., Boyle, L., Pointing, S., Chen, Y., Dungan, J., Liu, S. and McKay, C. (2007) Lithophytic Cyanobacterial Communities Across Environmental Gradients and Spatial Scales in China's Hot and Cold Deserts. *FEMS Microbiology Ecology*, vol. 61, 470-482.
25. Warren-Rhodes, K., Dungan, J., Piatek, J., Stubbs, K., Chen, Y. and McKay, C. (2007) Ecology and Spatial Pattern of Cyanobacterial Community Island-Patches in Atacama Desert, Chile. *J. Geophysical Research-Biogeosciences*, vol. 112.
26. Chen, Y. (2006) Application of Matroid Theory for Diagnosability Study of Coordinate Sensing Systems in Discrete-Part Manufacturing Processes. *Technometrics*, vol. 48, 386-398.
27. Zantek, P., Li, S., and Chen, Y. (2006) Detecting Multiple Special Causes from Multivariate Data with Applications to Fault Detection in Manufacturing. *IIE Transactions*, vol. 39, 771-782.
28. Chen, Y. and Jin, J. (2006) Quality-Oriented-Maintenance for Multiple Interactive Components. *IEEE Transactions on Reliability*, vol. 55, 123-134.
29. Chen, Y., Ding, Y., Jin, J., and Ceglarek, D. (2006) Integration of Tolerance and Maintenance Design for Multistage Manufacturing Processes. *IEEE Transactions on Automation Science and Engineering*, vol. 3, 440-453.
30. Chen, Y. and Yang, Q. (2005) Reliability of Two-Stage Weighted-k-out-of-n Systems with Components In Common. *IEEE Transactions on Reliability*, vol. 54, 431-440.
31. Chen, Y. and Jin, J. (2005) Quality-Reliability Chain Modeling for System-Reliability Analysis of Complex Manufacturing Processes. *IEEE Transactions on Reliability*, vol. 54, 475-488.
32. Liu, Q., Ding, Y., and Chen, Y. (2005) Optimal Coordinate Sensor Placements for Estimating Mean and Variance Components of Variation Sources. *IIE Transactions*, vol. 37, 877-889.
33. Chen, Y., Jin, J. and Shi, J. (2004) Integration of Dimensional Quality and Locator Reliability in Design and Evaluation of Multi-station Body-In-White Assembly Processes. *IIE Transactions*, vol. 36, 827-839.
34. Zhou, S., Chen, Y., and Shi, J. (2004) Statistical Estimation and Testing for Variation Root Cause Determination of Multistage Manufacturing Processes. *IEEE Transactions on Automation Science and Engineering*, vol. 1, 73-83.
35. Ding, Y., Zhou, S., and Chen, Y. (2004) A Comparison of Process Variation Estimators for In-Process Dimensional Measurements and Control. *ASME Transactions, Journal of Dynamic Systems, Measurement and Control*, vol. 127, 69-79.

36. Chen, Y. and Jin, J. (2003) Cost-Variability-Sensitive Preventive Maintenance Considering Management Risk. *IIE Transactions*, vol. 35, 1091-1101. (Awarded the *Best Paper Award* for IIE Transactions on Quality and Reliability Engineering)
37. Zhou, S., Ding, Y., Chen, Y., and Shi, J. (2003) Diagnosability Study of Multistage Manufacturing Processes Based on Linear Mixed-Effects Models. *Technometrics*, vol. 45, 312-325.
38. Jin, J. and Chen, Y. (2001) Quality and Reliability Information Integration for Design Evaluation of Fixture System Reliability. *Quality and Reliability Engineering International*, vol. 17, 355-372.

Conference Proceedings

1. Zhou, S. and Chen, Y. (2009) Event-Log-Based Failure Prediction and Maintenance Service for After-Sales Engineering Systems, Proceedings of 2009 NSF Engineering Research and Innovation Conference, Honolulu, Hawaii.
2. Ding, Y. and Chen, Y. (2009) Fault Tolerance Analysis and Design of Clustered Sensor Networks, Proceedings of 2009 NSF Engineering Research and Innovation Conference, Honolulu, Hawaii.
3. Chen, Y. and Yang, Q. (2008) Reliability of Coordinate Sensor Systems Under the Risk of Sensor Precision Degradation, Proceedings of 2008 NSF Research and Innovation Conference, Knoxville, Tennessee.
4. Cho, J. J., Ding, Y., Chen, Y., and Tang, J. (2007) Robust Calibration for Localization in Clustered Wireless Sensor Networks, The 3rd annual IEEE Conference on Automation Science and Engineering, Scottsdale, AZ.
5. Chen, Y., Donaldson, I. (2006) Application of Matroid Theory to Reliability Study of Coordinate Sensor Systems for Manufacturing Process Fault Diagnosis, Proceedings of 2006 NSF Design, Service, and Manufacturing Grantees and Research Conference, St. Louis, Missouri.
6. Chen, Y., Jin, J. and Shi, J. (2002) Quality and Reliability Integration in Multiple Station Autobody Assembly Processes. Proceedings of the 5th International Conference on Frontiers of Design and Manufacturing, Dalian, China, 2002.
7. Chen, Y., Jin, J. and Shi, J. (2001) Reliability Modeling and Analysis of Multi-station Manufacturing Processes Considering the Quality and Reliability Interaction. Proceedings of IEEE International Conference on Systems, Man, and Cybernetics, Tucson, AZ, 2001.

Presentations and Seminars

Invited Seminars and Short Courses:

- “A New Bayesian On-Line Inference Method for Short-Run SPC”, 7th International Quality and Reliability Technology Workshop, June 2017.
- “Short Course on Reliability and Degradation Modeling”, China Academy of Space Technology, July 2015.

- “Reliability and Fault-Tolerance of Redundant Systems”, Quality Science Center, Chinese Academy of Sciences, June 2014.
- “Reliability Analysis for Linear Sensor Systems”, Center for Energy & Environmental Policy Research, Beijing Institute of Technology, June 2014.
- “Reliability Analysis for Linear Sensor Systems”, Quality Science Center, Chinese Academy of Sciences, December 2013.
- “Application of Matroid Theory in Redundancy Analysis of Linear Sensor Systems”, Applied Mathematical and Computational Sciences Program, University of Iowa, May 2013.
- “Application of Matroid Theory in Diagnosability and Redundancy Analysis of Linear Sensor Systems”, Invited Seminar at Dept. of Statistics and Actuarial Science, University of Iowa, March 2006.
- “Cost-Variability-Sensitive Preventive Maintenance Considering Management Risk”, *IIE Transactions Best Paper Award Presentation*, Invited by Editor-in-Chief, IERC, Atlanta, May 2005.
- “Diagnosability Analysis of Multi-Station Manufacturing Systems based on Mixed Linear Models”, *Technometrics Selected Paper Presentation*, Invited by Editor, INFORMS, Atlanta, GA, October 2003
- “Diagnosis and Maintenance of Complex Manufacturing Systems”, Invited Seminar at Dept. of Management Sciences, College of Business, University of Iowa, October 2003.
- “Diagnosability Analysis and Maintenance Decision for In-Process Quality Improvement”, Dept. of Mechanical and Industrial Engineering, University of Iowa, March 2003.
- “Diagnosability Analysis and Maintenance Decision for In-Process Quality Improvement”, Dept. of Industrial Engineering and Management Sciences, Northwestern University, February 2003.

At National/International Conferences:

1. “A Bayesian Variable Selection Method for Joint Diagnosis of Manufacturing Process and Sensor Faults”, IISE Annual Conference, Pittsburg, PA, 2017.
2. “A Bayesian Variable Selection Method for Joint Diagnosis of Manufacturing Process and Sensor Faults”, INFORMS, Nashville, TN, 2016.
3. “Online Steady-state Detection for Process Control Using Multiple Change-point Models”, INFORMS, Philadelphia, PA, 2015.
4. “Risk Averse Strategic Planning of HVDC Grids”, INFORMS, San Francisco, CA, 2014.
5. “Online Steady-State Detection Using Sequential Monte Carlo Methods”, INFORMS, San Francisco, CA, 2014.
6. “On-line Steady-state Detection Based on Multiple Change-point Models Using Particle Filters”, INFORMS, Minneapolis, MN, 2013.
7. “Statistical Monitoring of Multiple Binary Data Streams”, Minneapolis, MN, 2013.

8. "Detect Warm-Up Period for Discrete-Event Simulations Using a Self-Starting Control Chart", INFORMS, Charlotte, 2011.
9. "A New Optimization Framework for the Network Reliability Design Problem", INFORMS, Austin, 2010.
10. "A Statistical Selection Procedure for the Network Reliability Design Problem", IIE Annual Conference, Miami, FL, 2009.
11. "A Statistical Selection Procedure for the Network Reliability Design Problem", INFORMS Western Regional Conference, Tempe, AZ, 2009.
12. "Diagnosis of Process and Sensor Faults in Manufacturing Processes", INFORMS, Washington D.C., 2008.
13. "Evaluation of Linear Sensor System Reliability Using Monte Carlo Methods", INFORMS, Seattle, WA, 2007
14. "Redundancy and Robustness Analysis of a Structured Linear Model Using Matroid Decomposition", INFORMS, Seattle, WA, 2007
15. "Evaluation of Coordinate Sensor System Reliability Using Monte Carlo Methods", INFORMS, Pittsburgh, PA, 2006
16. "Sensor Fault Detection for Manufacturing Quality Control", INFORMS, Pittsburgh, PA, 2006
17. "Sensor System Reliability Analysis for Manufacturing Variation Control", JRC, Knoxville, TN, 2006
18. "Monitoring of Process and Sensor Fault Based on a Fault-quality Model", INFORMS, San Francisco, CA, 2005
19. "Multi-Component Degradation Modeling in Large Scale Systems", INFORMS, San Francisco, CA, 2005
20. "Optimal Coordinate Sensor Redundancy Allocation", INFORMS, San Francisco, CA, 2005
21. "Application of Matroid Theory for Diagnosability Study of Coordinate Sensing Systems in Discrete-Part Manufacturing Processes", IERC, Atlanta, GA, 2005
22. "Reliability of Coordinate Sensing Systems Under the Risk of Increasing Measurement Variance", IERC, Atlanta, GA, 2005
23. "Application of Matroid Theory to Reliability Study of Coordinate Sensing Systems for Automatic Fault Diagnosis", INFORMS, Denver, CO, 2004.
24. "Reliability of Coordinate Sensing Systems Under the Risk of Increasing Measurement Variance", INFORMS, Denver, CO, 2004.
25. "Two-Stage Weighted-k-out-of-n Models with Network Applications", Fourth International Conference on Mathematical Methods in Reliability, Sante Fe, NM, 2004.
26. "Two-Stage Weighted-k-out-of-n Models with Components in Common", IERC, Houston, TX, 2004.
27. "Cost-Variability-Sensitive Preventive Maintenance Considering Management Risk", INFORMS, Atlanta, 2003.
28. "Quality-Oriented-Maintenance for Multiple Interactive Components", INFORMS, Atlanta, 2003.

29. “Diagnosis of Variation Sources Using Linear Replicated Models”, INFORMS, San Jose, 2002.
30. “Quality and Reliability Integration in Multiple Station Autobody Assembly Processes”, the 5th International Conference on Frontiers of Design and Manufacturing, Dalian, China, 2002.
31. “Quality and Reliability Chain Modeling for System Reliability Analysis in Multi-station Manufacturing Processes”, INFORMS, Miami, 2001.
32. “Reliability Modeling and Analysis of Multi-station Manufacturing Processes Considering the Quality and Reliability Interaction”, IEEE International Conference on Systems, Man, and Cybernetics, Tucson, AZ, 2001.
33. “Quality and Reliability Information Integration in Multistage Manufacturing Processes”, the 9th Annual Industrial Engineering Research Conference, Cleveland, 2000.

SERVICE AND PROFESSIONAL ACTIVITIES

1. Society Officer Position

Program Committee Member, Sensor Web Enablement (SWE), 2011.

Secretary/Treasurer, INFORMS Section on Quality, Statistics, and Reliability, 2006-2008.

Newsletter Editor, INFORMS Section on Quality, Statistics, and Reliability, 1998-2003.

2. Editorship and Editorial Functions

- **Department Editor**, IIE Transactions, 2019 - present
- **Associate Editor**, IIE Transactions, 2017 – 2019.
- **Associate Editor**, Technometrics, 2016 - present.
- **Associate Editor**, Naval Research Logistics, 2006 – present.
- **Associate Editor**, Journal of Quality Technology, 2009 – 2017.
- **Co-Editor**, IIE Transactions special issue on Data Analytics and Decision Making for Internet-of-Things (IoT) Enabled Systems, 2020 – present.
- **Co-Editor**, Quality and Reliability Engineering International special issue on INFORMS 2015, 2015-2016.
- **Editorial Board Member**, Technometrics special issue on system informatics, 2013 – 2014.
- **Journal/Transaction Reviewers:**
Technometrics, Journal of Quality Technology, IEEE Transactions on Systems, Man, and Cybernetics, IEEE Transactions on Automation Science and Engineering, IEEE Transactions on Reliability, IEEE Transactions on Sustainable Energy, Naval Research Logistics, Automatica, IIE Transactions, Journal of Flexible Manufacturing Systems, International Journal of Production Research

3. Service to Government Agency

Served as a panelist/reviewer on six National Science Foundation (NSF) proposal review panels since 2006.

4. Major Internal Services

- Program Coordinator, Industrial Engineering program, University of Iowa (2015 – 2018)
- Chair, Industrial Engineering Program ABET Committee (2012 – present): Lead ABET efforts of Industrial Engineering Program at University of Iowa for the 2014-2015 ABET review cycle.
- Undergraduate Chair, Industrial Engineering Program (2013 – present)
- Graduate Chair, Industrial Engineering Program (2010 – 2013)

PROFESSIONAL SOCIETIES

- Institute for Operations Research and the Management Sciences (INFORMS)
- Institute of Industrial and Systems Engineers (IISE)
- American Statistical Association (ASA)
- Institute of Mathematical Statistics (IMS)