

ABIGAIL R. WOOLDRIDGE, Ph.D.

Curriculum Vitae

Department of Industrial and Enterprise Systems Engineering (217) 300-8086
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University of Illinois at Urbana-Champaign arwool@illinois.edu
117 Transportation Building wooldridge.abigail.r@gmail.com
104 South Mathews Avenue <https://ise.illinois.edu/directory/profile/arwool>
MC-238 <https://hfss.ise.illinois.edu>
Urbana, Illinois 61801 [Google Scholar](#)

EDUCATION

- 2015 – 2018 University of Wisconsin – Madison
Degree: Doctor of Philosophy in Industrial Engineering (2018)
Thesis: *Team Cognition Distributed in Spatio-Temporal Processes: A Macroergonomic Approach to Trauma Care*
Focus: Human Factors and Ergonomics
Minor: Mixed Methods in Field Research
- 2012 – 2013 University of Wisconsin – Madison
Degree: Master of Science in Industrial and Systems Engineering (2013)
Focus: Human Factors and Ergonomics
- 2007 – 2012 University of Louisville
Degree: Master of Engineering in Industrial Engineering (2012; *Summa Cum Laude*)
Thesis: *Modeling the Workflow of One Primary Care Physician-Nurse Team*
Focus: Operations Research and Applied Statistics,
Degree: Bachelor of Science, Industrial Engineering (2011; *Summa Cum Laude*)

PROFESSIONAL EXPERIENCE

University of Illinois at Urbana-Champaign, Urbana, Illinois

2018 – Present

- Assistant Professor, Department of Industrial and Enterprise Systems Engineering, Grainger College of Engineering, 2018 – Present
- Affiliate Faculty (0%), Beckman Institute for Advanced Science and Technology, 2018 – Present
- Courtesy (0%) Appointment, Kinesiology and Community Health, College of Applied Health Sciences, 2019 – Present
- Courtesy (0%) Appointment, School of Information Sciences, 2019 – Present

- Courtesy (0%) Appointment, Computer Science, Grainger College of Engineering, 2020 – Present
- Courtesy (0%) Appointment, Department of Biomedical and Translational Sciences, Carle Illinois College of Medicine, 2020 – Present
- Courtesy (0%) Appointment, Coordinated Science Laboratory, 2021 – Present
- Lecturer, August – October 2018
- Adjust Research Affiliate, April – August 2018

University of Wisconsin-Madison, Madison, Wisconsin
2015 –2018

- Research Assistant, Center for Quality and Productivity Improvement and Department of Industrial and Systems Engineering
Research Projects:
Care Transitions and Teamwork in Pediatric Trauma: Implications for Health Information Technology Design (AHRQ Grant # R01-HS23837).
Understanding Primary Care Teamwork in Context: Implications for Health Information Technology Design (AHRQ Grant # R01-HS022505).

University of Miami, Miami, Florida
2013 –2015

- Senior Decision Support Analyst, Bascom Palmer Eye Institute, Miller School of Medicine

University of Wisconsin-Madison, Madison, Wisconsin
2012 –2013

- Research Assistant, Center for Quality and Productivity Improvement and Department of Industrial and Systems Engineering
Research Project:
Keystone Beacon Community Proposal for a Rural Community-Wide Medical Home (US Office of the National Coordinator Award # 90BC001301).

Advanced Solutions, Inc., Louisville, Kentucky
2011 – 2012

- Industrial and Systems Engineer

University of Louisville, Louisville, Kentucky
2008 – 2011

- Student Assistant, Department of Engineering Fundamentals
- Tutor, Athletic Academic Services,

TechSolve, Inc., Cincinnati, Ohio

2009 – 2010

- Industrial Engineering Intern, Spring 2009, Fall 2009, Summer 2010

Stonestreet One, Louisville, Kentucky

2007

- Quality Assurance Intern

AWARDS AND HONORS**National Awards**

2021	The Robert L. Wears Early Career Award, Healthcare Technical Group, Human Factors and Ergonomics Society
2020	National Science Foundation Smart and Connected Health Aspiring PI Award, 2020 Advancing Health Through Science Workshop
2016	Human Factors and Ergonomics Society Alphonse Chapanis Student Paper Award Semi-Finalist (Top 10)
2011 – 2012	Tau Beta Pi Fife Fellow
2011 – 2012	Alpha Pi Mu Wolter J. Fabrycky Scholarship
2007	National Merit Scholar

University Awards

2021	University of Illinois System's Presidential Medallion <i>Note: This is the highest award in the University of Illinois System</i>
2021	Grainger Engineering COVID-19 Wall of Recognition in Engineering
2020	Teacher Ranked as Excellent Fall 2020 for IE 598 – Job and Organization Design
2020	Teacher Ranked as Excellent Fall 2020 for IE 598 – Field Research in Health Care
2020	Teacher Ranked as Excellent Spring 2020 for IE 340
2019	Teacher Ranked as Excellent Spring 2019 for IE 340
2013	AHRQ T32 Training Grant Trainee (PI: Maureen Smith, Department of Population Health Sciences)
2012	Wisconsin Distinguished Graduate Fellow
2012	Outstanding Student Award (Speed School Honor Graduate)
2012	Lewis S. Streng Award
2007 – 2012	University of Louisville Dean's Scholar
2007 – 2012	University of Louisville Honors Program

2008 Highest Panhellenic Cumulative GPA
2007 Grawemeyer Scholarship

Departmental Awards

2020 ISE Department Head Teaching Award
2017 Antoinette Derjani-Bayeh Scholarship for women/minority students
interested in socially active causes
2016 UW Industrial and Systems Engineering Department Graduate Student
Travel Award

Other Recognition

2021 Advisor of Winner, HFES Health Care Technical Group Marilyn Sue
Bogner Student Paper Award
2020 Advisor of Winner, HFES Health Care Technical Group Marilyn Sue
Bogner Student Paper Award
2019 Winner, Best Paper Award, International Conference on Quantitative
Ethnography 2019
2017 UW-Madison Teaching Academy Affiliate
2011 Kentucky Derby Festival Princess
2011 Alfred T. Chen Memorial Scholarship
2010 Greater Louisville Manufacturing & Logistics Network Scholarship
2008, 2009 Sigma Kappa Most Outstanding Student
2007 Howard B. Dillon Scholarship

RESEARCH FUNDING

TOTALS: \$2,511,297

\$1,910,9033 (PI)

\$178,337 (co-PI)

\$422,057 (startup)

Current Funding

Title: A Human Factors Approach to Food Security

Dates: 3/1/2020-2/28/2021

Funding Agency: Jump ARCHES through the Health Care Engineering Systems Center

Total Award Amount: \$75,000.00

Role: Principal Investigator

Title: Monitoring the 'Health' of the Hospital: Using Wearable Sensors to Monitor Nursing Stress

Dates: 1/1/2022-12/31/2021

Funding Agency: Jump ARCHES through the Health Care Engineering Systems Center

Total Award Amount: \$78,810.00

Role: Principal Investigator

Title: Startup Package

Funding Agency: University of Illinois at Urbana-Champaign

Total Award Amount: \$422,057.00

Completed Funding

Title: mobileSHIELD: A Proposal to Broaden Impact of SHIELD T3 Through Mobile Labs

Dates: 7/15/2020-12/31/2020

Funding Agency: University of Illinois System

Total Award Amount: \$1,700,000.00

Role: Principal Investigator

Title: Using Simulation to Evaluate and Improve Team Cognition in Handoffs

Dates: 3/1/2019-2/29/2020; no cost extension through 3/1/2021

Funding Agency: Jump ARCHES through the Health Care Engineering Systems Center

Total Award Amount: \$57,093.00

Role: Principal Investigator

Title: The i-AREA-p; an intelligent mobility-based augmented reality simulation application for pediatric resuscitation training

Dates: 3/1/2019-2/29/2020; no cost extension through 3/1/2021

Funding Agency: Jump ARCHES through the Health Care Engineering Systems Center

Total Award Amount: \$96,769.00 (Wooldridge component \$46,435.00)

Role: Co-Principal Investigator (PI Croland, University of Illinois College of Medicine at Peoria)

Title: Pediatric Sepsis Guidance System

Dates: 3/1/2019-2/29/2020

Funding Agency: Jump ARCHES through the Health Care Engineering Systems Center

Total Award Amount: \$81,568.00 (Wooldridge component \$5,739.00)

Role: Co-Investigator (PI Sha, Department of Computer Science)

Pending Funding

Title: PIPP Phase I: Integrated drivers of Infection Genomics for One Health

Dates: 09/2022-02/2024

Funding Agency: National Science Foundation

Total Award Amount: \$1,000,000 (Wooldridge component \$4,545.33)

Role: Senior Personnel (PI Nguyen, Department of Civil and Environmental Engineering)

Title: SCH: The Health of the Health Care Worker: A Sensor-Based System to Predict, Identify and Respond to Clinician Burnout

Dates: 10/1/2022-9/30/2026

Funding Agency: National Science Foundation

Total Award Amount: \$1,001,599

Role: Principal Investigator

Planned Submissions

Title: Engaging Family in Pediatric Care Transitions Through Digital Health Technology

Submission Deadline: June 2022

Funding Agency: Agency for Health Care Research and Quality

Role: Principal Investigator

Title: Modeling and Evaluating Interactions Between and Within Sociotechnical Systems

Submission Deadline: July 2022

Funding Agency: National Science Foundation

Role: Principal Investigator

Note: second submission.

RESEARCH PUBLICATIONS

Books

1. Roscoe, R. (Ed.), Chiou, E. (Ed.), **Wooldridge, A.** (Ed.). (2020). *Advancing Diversity, Inclusion, and Social Justice Through Human Systems Engineering*. Boca Raton: CRC Press, <https://doi.org/10.1201/9780429425905>. *Note: Winner of the Choice Outstanding Academic Title 2020 Award; the Choice OAT Award represents the highest caliber of scholarly titles that have been reviewed by Choice and conveys the extraordinary recognition of the academic community.*

Published or Accepted Refereed Archival Journal Publications

*Students I directly supervised

**Students I supervised for the paper, but are directly supervised by other faculty

1. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P. L. T., Hose, B.-Z., **Schroerer, K., Brazelton, T., Eithun, B., Rusy, D., Ross, J., Kohler, J., Kelly, M., Dean, S., Rahal, R., Springman, S. & Gurses, A. P. (2022) Care Transitions of Trauma Patients: Processes with Articulation Work Before and After Handoff. *Applied Ergonomics*.
<https://doi.org/https://doi.org/10.1016/j.apergo.2021.103606>
2. Hanson K., Shaikh, N., **Wooldridge, A. R.**, Kendhari, H., Krzyzaniak, S., Riech, T., Vazquez-Melendez, E., Mischler, M., Ebert-Allen, R., Barton, G., Formella, K. T., Abbott, Z. R., Wolfe, D., Croland, T. Use of an Augmented Reality Application for Pediatric Code Cart and Resuscitation Training. (2021) *BMJ Innovations*.
doi: 10.1136/bmjinnov-2020-000628
3. **Wooldridge, A. R.**, **Ramadhani, W. A., Hanson K., Vazquez-Melendez, E., Kendhari, H., Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K. T., Abbott, Z. R., Farmer, J. N., Ebert-Allen, R. & Croland, T. (2021). Walking the Line: Performance Barriers and Facilitators in an Augmented Reality Mobile Application for Pediatric Code Cart Training. *Ergonomics*.
<https://doi.org/https://doi.org/10.1080/00140139.2021.1954685>
4. **Wooldridge, A. R.** (2021). The Time is Now: Developing Ergonomics for Equity and Justice through Intersectionality. *Ergonomics SA : Journal of the Ergonomics Society of South Africa*, 32(1), 10-18. <https://doi.org/doi:10.4314/esa.v32i1.3>.
5. Kianfar, S., Hundt, A. S., Hoonakker, P. L. T., Salek, D., **Wooldridge, A. R.**, Carayon, P. (2021) Understanding Care Transition Notifications for Chronically Ill Patients. *IISE Transactions on Healthcare Systems Engineering*.
<https://doi.org/10.1080/24725579.2021.1912217>
6. King, W. P., Amos, J., Azer, M., Baker, D., Bashir, R., Best, C., Bethke, E., Boppart, S. A., Bralts, E., Dietkus, R., Durack, G., Elbel, S., Elliott, G., Fava, J., Goldenfeld, N., Goldstein, M. H., Hayes, C., Herndon, N., Jamison, S., Johnson, B., Johnson, H., Johnson, M., Kolaczynski, J., Lee, T., Maslov, S., McGregor, D., Milner, D., Moller, R., Mosley, J., Musser, A., Newberger, M., O'Bryan, L., O'Leary, J., Pagano, A., Philpott, M., Pianfetti, B., Pille, A., Pizzuto, L., Rubessa, M., Rylowicz, S., Shipleys, C., Stewart, B., Switzky, R., Tawfick, S., Wheelers, M., White, K., Wood, E., Wood, C., & **Wooldridge, A. R.** (2020). Emergency ventilator for COVID-19. *PLOS One*, 15(12), e0244963.
7. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P., Hose, B.-Z., Eithun, E., Brazelton, T., Ross, J., Kohler, J. E., Kelly, M. M., Dean, S. M., Rusy, D., Gurses, A. P. (2020). Work System Barriers and Facilitators in Inpatient Care Transitions of Pediatric Trauma

- Patients. *Applied Ergonomics*, 85, 103059.
<https://doi.org/https://doi.org/10.1016/j.apergo.2020.103059>.
8. Carayon, P., **Wooldridge, A. R.**, Hoonakker, P., Hundt, A. S., Kelly, M. M. (2020). SEIPS 3.0: Human-Centered Design of the Patient Journey. *Applied Ergonomics*, 84, 103033. <https://doi.org/https://doi.org/10.1016/j.apergo.2019.103033>.
 9. Hoonakker, P., **Wooldridge, A.**, Hose, B. Z., Carayon, P., Eithun, B., Brazelton, T., ... & Rusy, D. (2019). Things Falling Through the Cracks: Information Loss During Pediatric Trauma Care Transitions. *Internal and Emergency Medicine*, 14(5): 797-805. <https://doi.org/10.1007/s11739-019-02110-7>
 10. Hose, B.-Z., Hoonakker, P. L. T., **Wooldridge, A. R.**, Ross, J., Kohler, J., Brazelton, T., Eithun, B., Kelly, M., Dean, S., Rusy, D., Gurses, A., Feckler, J. & Carayon, P. (2019) Physicians' Perceptions of the Problem List in Pediatric Trauma Care. *Applied Clinical Informatics*, 10(1):113-122.
 11. Carayon, P., **Wooldridge, A. R.**, Hose, B.-Z., Salwei, M. & Benneyan, J. (2018) Improving Patient Safety Through Human Factors and Systems Engineering: Opportunities and Challenges. *Health Affairs*, 37(11), 1862-1869.
 12. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P. L. T., Hose, B.-Z., Ross, J., Kohler, J., Brazelton, T., Eithun, B., Kelly, M., Dean, S., Rusy, D., Durojaiye, A. & Gurses, A. P. (2019). Complexity of the Pediatric Trauma Care Process: Implications for Multi-Level Awareness. *Cognition, Technology and Work*, 21: 397-416. doi:10.1007/s10111-018-0520-0.
 13. **Wooldridge, A. R.**, Carayon, P., Eagan, B., & Shaffer, D. W. (2018). Quantifying the Qualitative with Epistemic Network Analysis: A Human Factors Case Study of Task-Allocation Communication in a Primary Care Team. *IISE Transactions on Healthcare Systems Engineering*. DOI: 10.1080/24725579.2017.1418769
 14. **Wooldridge, A. R.**, Carayon, P., Hundt, A. S., & Hoonakker, P. L. T. (2017). SEIPS-based process modeling in primary care. *Applied Ergonomics*, 60, 240-254.
 15. Carayon, P., Kianfar, S., Li, Y., Xie, A., Alyousef, B., & **Wooldridge, A.** (2015). A systematic review of mixed methods research on human factors and ergonomics in health care. *Applied Ergonomics*, 51, 291-321.

Submitted Refereed Archival Publications

1. **Wooldridge, A. R.** Correlation Between Handoff Quality, Satisfaction and Team Cognition in Simulated Handoffs. *International Journal for Quality in Health Care*.
2. **Wooldridge, A. R.**, Carman, E.-M, Xie, A. Human Factors and Ergonomics (HFE) Applications in Responses to the COVID-19 Pandemic: Lessons Learned and Considerations for Methods. *Applied Ergonomics*. *Revise and resubmit*

3. *Leite, C. & **Wooldridge, A. R.** Measurement and Prediction of Nursing Burnout: An Overview of the Literature from 1980 to 2019. *IISE Transactions on Healthcare Systems Engineering*.
4. **Wooldridge, A. R.**, *Morgan, J., **Ramadhani, W. A., Hanson K., Vazquez-Melendez, E., Kendhari, H., Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K. T., Abbott, Z. R., Farmer, J. N., Ebert-Allen, R. & Croland, T. Emergent Properties in Sociotechnical Systems: Achieving Balance in the Use of an Augmented Reality Mobile Application. *Human Factors. Second review*.
5. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P. L. T., Hose, B.-Z., Shaffer, D. W., Brazelton, T., Eithun, B., Rusy, D., Ross, J., Kohler, J., Kelly, M., Springman, S., & Gurses, A. P. Team Cognition in Handoffs: Integrating Sociotechnical Systems with Team Cognition. *Human Factors. Second review*.
6. Carayon, P., Hose, B.-Z., **Wooldridge, A. R.**, Brazelton, T., Dean, S., Eithun, B., Kelly, M., Kohler, J., Ross, J., Rusy, D., Hoonakker, P. L. T. Human-Centered Design of Team Health IT for Pediatric Trauma Care Transitions. *International Journal of Medical Informatics. Second review*.

Refereed Archival Publications in Preparation

1. *Hale-Lopez, K. L., **Wooldridge, A. R.**, Goldstein, M. Work System Design to Support Complex Adaptive Systems: Improving the Effectiveness of an Interdisciplinary Team Responding to Societal Crises.
2. **Wooldridge, A. R.**, *Hale-Lopez, K. L., Goldstein, M. Designing Health Information Technology to Support Processes through SEIPS-Based Process Modeling.
3. **Wooldridge, A. R.**, *Mayes, E., Jeziorczak, P. M., Gehlback, J. A. Developing Measures of Team Cognition in Simulated Care Transitions.
4. *Mayes, E., **Wooldridge, A. R.**, Jeziorczak, P. M., Gehlback, J. A. Machine Learning to Operationalize Team Cognition Analysis: A Case Study of Patient Handoffs.
5. *Leite, C., **Wooldridge, A. R.**, *Yuceel, I. & Chronopoulou, A. Relating Heart Rate Variability with Workload, Occupational Stress and Burnout in COVID-19 Laboratory Technicians.
6. Sprackling, C. M., Kieren, M. Q., Nacht, C. L., Moreno, M. A., **Wooldridge, A. R.**, Kelly, M. M. Sharing doctors' notes to improve youth to adult transitions.
7. Kelly, M. M., Coller, R. J., Dean, S. M., Nacht, C. L., Sklansky, D. J., Smith, C. A., & **Wooldridge, A. R.** Parent Experiences with medical jargon in physicians' notes during their child's hospitalization.

Invited Book Chapters

1. **Wooldridge, A. R.** & Rogers, W. (2021) Patient Ergonomics in Disability and Aging. In R. Holden & R. Valdez (Ed.), *The Patient Factor: Applications of Patient Ergonomics, Volume II* (pp. 139-162). Boca Raton: CRC Press
2. Carayon, P., & **Wooldridge, A. R.** (2020). Improving Patient Safety in the Patient Journey: Contributions from Human Factors Engineering. In A. E. Smith (Ed.), *Women in Industrial and Systems Engineering: Key Advances and Perspectives on Emerging Topics* (pp. 275-299). Cham: Springer International Publishing.
3. Carayon, P., Kianfar, S., Li, Y., & **Wooldridge, A.** (2015). Organizational design: Macroergonomics as a foundation for human systems integration. In D. A. Boehm-Davis, F. T. Durso & J. D. Lee (Eds.), *APA Handbook of Human Systems Integration* (1 ed., pp. pp.573-588). Washington, D.C.: American Psychological Association.

Items at Conferences

*Students I directly supervised

**Students I supervised for the paper, but are directly supervised by other faculty

Refereed Published Conference Proceedings (Oral Presentations)

1. Shum, S B., Irgens, G. A., Moots, H., Phillips, M., Shah, M., Vega, H. & **Wooldridge, A. R.** (Accepted). Participatory Quantitative Ethnography. *Submitted to the International Conference on Quantitative Ethnography 2021.*
2. Boisvenue, J. J., Jung, H. S., Jung, S., Poplov, V., Ruis, A. R., **Wooldridge, A. R.**, Zorgo, A. (Accepted). Considerations for the use of Quantitative Ethnography in Healthcare. *Submitted to the International Conference on Quantitative Ethnography 2021.*
3. Robertson, M., Hallbeck, S., Cohen, T., Parush, A., **Wooldridge, A. R.**, Waterson, P. (Accepted). Human Factors/Ergonomics and Systems in Healthcare – Session II. *Accepted to HSI2021.*
4. *Hale-Lopez, K. L., **Wooldridge, A. R.**, Goldstein, M. H. (2021). Using Technology to Support Distributed Teams: A Work System-Based Study of an Interdisciplinary Team Responding to COVID-19. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 65, No. 1). Sage CA: Los Angeles, CA: SAGE Publications. *Note: Winner of Health Care Technical Group Marilyn Sue Bogner Student Paper Award.*
5. **Lusebrink, R., **Wooldridge, A. R.**, *Spiwak, M., (2021). Advancing Equitable and Just Practices in Human Factors and Ergonomics. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 65, No. 1). Sage CA: Los Angeles, CA: SAGE Publications.

6. *Spiwak, M., **Wooldridge, A. R.**, **Lusebrink, R. (2021). Increasing Diversity and Inclusion in Human Factors. *Accepted to the 65th Human Factors and Ergonomics Society Annual Meeting*.
7. **Wooldridge, A. R.**, Rogers, C. C., Reid, C. R., Valdez, R. S., Endsley, M., Holden, R. J., Sommerich, C. M., Thatcher, A. (2021). Being Bold: How HFES Can Encourage Responsible, Timely and Participative Ergonomics to Address Societal Issues. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 65, No. 1). Sage CA: Los Angeles, CA: SAGE Publications. **Wooldridge, A. R.**, DiFilippo, K. N., Holden, R. J., Ozkaynak, M., Yu, D. (2021). Improving Health Through the Application of Ergonomics to Food Practices. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 65, No. 1). Sage CA: Los Angeles, CA: SAGE Publications.
8. **Wooldridge, A. R.** (2021). The Application of Systems Ergonomics to the Design of a Mobile COVID-19 Laboratory. In: Black N.L., Neumann W.P., Noy I. (eds) *Proceedings of the 21st Congress of the International Ergonomics Association (IEA 2021)*. IEA 2021. Lecture Notes in Networks and Systems, vol 222. Springer, Cham. https://doi.org/10.1007/978-3-030-74611-7_92.
9. Jung, S., Popov, V., Ruis, A. R., Wooldridge, A. R., Zörger, S. (2021). Quantitative Ethnography in the Clinic. In: Ruis, A. R. & Lee, S. B. (eds) *Second International Conference on Quantitative Ethnography Conference Proceedings Supplement* (pp. 98-104). The International Society for Quantitative Ethnography.
10. **Heuck, E. & **Wooldridge, A. R.** (2020). Comparing Physician and Nurse Opinions of Team and Individual Handoffs: Does Role Influence Preference? In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 64, No. 1, pp. 613-617). Sage CA: Los Angeles, CA: SAGE Publications.
11. *Morgan, J., **Wooldridge, A. R.**, *Composto, A., **Mitchell, A., **Ramadhani, W., **Roychowdhury, J., Hanson, K., Vazquez-Melendez, E., Kendhari, H., Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K. T., Abbott, Z. R., Farmer, J. N., Ebert-Allen, R., Croland, T. (2020). Evaluating the Efficacy of a Mobile, Augmented Reality Pediatric Code Cart Education Application. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 64, No. 1, pp. 1028-1032). Sage CA: Los Angeles, CA: SAGE Publications. *Note: Winner of Health Care Technical Group Marilyn Sue Bogner Student Paper Award*.
12. **Wooldridge, A. R.**, Roscoe, R. D., Roberts, S. C., Valdez, R. S. (2020). Designing for Diversity: Implications for Research and Practice. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 64, No. 1, pp. 563-567). Sage CA: Los Angeles, CA: SAGE Publications.
13. Rogers, C., Valdez, R., Gilbert, J. E., Morales, K. L., Montague, E., Rogers, W., Thatcher, A., **Wooldridge, A. R.** (2020). Scaling Our Impact: Emerging Human Factors Applications Addressing Societal Challenges. In *Proceedings of the Human Factors and*

- Ergonomics Society Annual Meeting* (Vol. 64, No. 1, pp. 863-867). Sage CA: Los Angeles, CA: SAGE Publications.
14. Beadle, S., Spain, R., Goldberg, B., Ebnali, M., Bailey, S., Ciccone, B., Wilson, R., Rubensky, S., Carroll, M., Bennett, W., Hu, X., Reiner, A., Vasquez, H., **Wooldridge, A. R.**, Lee, L., Verma, P., Jeong, H., Gisick, L., French, J., & Keebler, J. (2020). Virtual reality, augmented reality, and virtual environments: Demonstrations of current technologies and future directions. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 64, No. 1, pp. 2119-2123). Sage CA: Los Angeles, CA: SAGE Publications.
 15. **Wooldridge, A. R.**, **Heuck, E., Jeziorczak, P. M., Gehlback, J. A. (2020). "Accidental" Design in Participatory Simulation. In Charles, R. & Golightly, D. (eds) *Contemporary Ergonomics and Human Factors 2020*. Chartered Institute of Ergonomics and Human Factors: Birmingham, UK. <https://publications.ergonomics.org.uk>. *Note: these are proceedings of Organizational Design and Management 2020 and Ergonomics of Human Factors Conference 2020; this paper was submitted to Organizational Design and Management.*
 16. **Wooldridge, A. R.**, **Ramadhani, W., **Roychowdhury, J., **Mitchell, A., Croland, T., Hanson, K., Vazquez-Melendez, E., Kendhari, H., Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K. T., Abbott, Z. R., Farmer, J. N., Ebert-Allen, R. (2020). Systemic Consequences of an Augmented Reality Mobile Paediatric Code Cart Application. In Charles, R. & Golightly, D. (eds) *Contemporary Ergonomics and Human Factors 2020*. Chartered Institute of Ergonomics and Human Factors: Birmingham, UK. <https://publications.ergonomics.org.uk>. *Note: these are proceedings of Organizational Design and Management 2020 and Ergonomics and Human Factors Conference 2020; this paper was submitted to Organizational Design and Management.*
 17. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P., Hose, B.-Z., Kelly, M. M., Brazelton, T. B., Eithun, B., Dean, S. M., Kohler, J. E., Ross, J. C., Rusy, D., Gurses, A. P. (2020). Contextual Factors Influencing Barriers and Facilitators in Paediatric Trauma Care Transitions. In Charles, R. & Golightly, D. (eds) *Contemporary Ergonomics and Human Factors 2020*. Chartered Institute of Ergonomics and Human Factors: Birmingham, UK. <https://publications.ergonomics.org.uk>. *Note: these are proceedings of Organizational Design and Management 2020 and Ergonomics and Human Factors Conference 2020; this paper was submitted to Ergonomics and Human Factors.*
 18. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P., Hose, B.-Z., Brazelton, T., Eithun, B., Dean, S., Kelly, M. M., Kohler, J., Ross, J., Rusy, D., Gurses, A. P. (2019). Team Cognition as a Barrier and Facilitator in Care Transitions: Implications for Work System Design. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 63, No. 1, pp. 648-652). Sage CA: Los Angeles, CA: SAGE Publications.
 19. **Wooldridge, A. R.**, Benda, N., Smith-Jackson, T. L., Nguyen, T., Gomes, K., Valdez, R., Wesley, D. B., Stonewall, J. (2019). HFE in Diversity, Inclusion and Social Justice: A

- Practical Primer. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 63, No. 1, pp. 636-639). Sage CA: Los Angeles, CA: SAGE Publications.
20. **Wooldridge A.R.** & *Haefli R. (2019) Using Epistemic Network Analysis to Explore Outcomes of Care Transitions. In: Eagan B., Misfeldt M., Siebert-Evenstone A. (eds) *Advances in Quantitative Ethnography. ICQE 2019*. Communications in Computer and Information Science, vol 1112. Springer, Cham. *Note: Recognized as Best Paper of the conference.*
 21. Hoonakker, P., **Wooldridge, A.**, Hose, B. Z., Carayon, P., Eithun, B., Brazelton, T., ... & Rusy, D. (2018, August). Things Falling Through the Cracks: Information Loss During Pediatric Trauma Care Transitions. In *Congress of the International Ergonomics Association* (pp. 479-488). Springer, Cham. doi:10.1007/978-3-319-96098-2_60
 22. Hose, B. Z., Carayon, P., Hoonakker, P., **Wooldridge, A.**, Brazelton, T., Dean, S., ... Gurses, A. (2018). Challenges of disposition decision making for pediatric trauma patients in the emergency department. In S. Bagnara, Y. Fujita, R. Tartaglia, S. Albolino, & T. Alexander (Eds.), *Proceedings of the 20th Congress of the International Ergonomics Association (IEA 2018) - Volume I: Healthcare Ergonomics* (pp. 339-345). (Advances in Intelligent Systems and Computing; Vol. 818). Springer Verlag. DOI: 10.1007/978-3-319-96098-2_44
 23. Waterson, P., **Wooldridge, A.**, Wooldridge, A., Sesto, M., Gurses, A., Holden, R., ... & Waterson, P. (2018, September). Improving Care Transitions in Healthcare: A Human Factors/Ergonomics (HFE) Approach. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 62, No. 1, pp. 551-555). Sage CA: Los Angeles, CA: SAGE Publications.
 24. **Wooldridge, A. R.**, Nguyen, T., Valdez, R., Montague, E., Milner, M. N., Dorneich, M. C., & Roscoe, R. (2018, September). Human Factors and Ergonomics in Diversity, Inclusion and Social Justice Research. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 62, No. 1, pp. 447-449). Sage CA: Los Angeles, CA: SAGE Publications.
 25. Chiou, E., **Wooldridge, A. R.**, Price, M., Mosqueda, E., & Roscoe, R. (2017). The Diversity Committee – Challenges and Opportunities for Involvement. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 61(1) 498-500.
 26. **Wooldridge, A. R.**, Hoonakker, P. L. T., Gurses, A. P., Carman, E.-M., Waterson, P., & Sesto, M. (2017). Designing and Managing Healthcare Transitions. In M. Fraser and M. Robertson (Eds.), *Human Factors in Organizational Design and Management - XII* (pp.538-541) Banff, Canada: Association of Canadian Ergonomists.
 27. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P., Musa, A., & Bain, P. (2016). Technology-Mediated Communication between Patients and Primary Care Clinicians and Staff: Ambiguity in Secure Messaging. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 60(1), 556-560.

28. Carayon, P., Kianfar, S., Li, Y., Xie, A., Alyousef, B., & **Wooldridge, A. R.** (2014). The use of mixed methods in healthcare human factors and ergonomics research. In O. Broberg, N. Fallentin, P. Hasle, P. L. Jensen, A. Kabel, M.E. Larsen & T. Weller (Eds.), *Human Factors in Organizational Design and Management – XI* (pp. 615-619). Copenhagen, Denmark: CPH Conference.

Refereed Published Conference Abstracts (Oral Presentations)

1. **Wooldridge, A. R.**, **Ramadhani, W., Hanson, K., Vazquez-Melendez, E., Kendhari, H., Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K. T., Abbott, Z. R., Farmer, J. N., Ebert-Allen, R., Croland, T. (2021). Achieving Balance Between Work System Barriers and Facilitators in the Use of an Augmented Reality Mobile Application. *Presented at the 21st Triennial Congress of the International Ergonomics Association.*
2. **Wooldridge, A. R.** & *Hale-Lopez, K. (2021). Human Factors/Ergonomics-Based Process Analysis and Improvement of a COVID-19 Laboratory Testing Process. *Presented at the Healthcare Systems Process Improvement Conference 2021.*

Refereed Conference Abstracts (Poster Presentations)

1. **Wooldridge, A. R.**, Tan, Y. & Eagan, B. (Accepted). Integrating Interdependence and Temporality in the Analysis of Team Cognition: Comparing ENA and dENA. *Submitted to the International Conference on Quantitative Ethnography 2021.*
2. **Ramadhani, W., **Wooldridge, A. R.**, **Roychowdhury, J., **Mitchell, A., Hanson, K., Vazquez-Melendez, E., Kendhari, H., Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K. T., Abbott, Z. R., Farmer, J. N., Ebert-Allen, R., Croland, T. (2020). Negotiating Time and Space: Investigating the Pediatric Code Cart Augmented Reality Application. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 64, No. 1, pp. 1365-1366). Sage CA: Los Angeles, CA: SAGE Publications.
3. **Wooldridge, A. R.**, Pascale Carayon, Peter Hoonakker, Bat-Zion Hose, Tom Brazelton, Ben Eithun, Joshua Ross, Jonathan Kohler, Michelle M. Kelly, Shannon Dean, Deborah Rusy, Ayse P. Gurses. (2019) A Macroergonomic Framework to Understand Team Cognition in Care Transitions. *2019 Human Factors and Ergonomics in Healthcare Symposium*, March 24-27, 2019, Chicago, Illinois.
4. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P., Hose, B.-Z., Ross, J., Kohler, J., Brazelton, T., Eithun, B., Kelly, M., Dean, S., Rusy, D., Gurses, A. (2017). Understanding Team Complexity in Pediatric Trauma Care. *Human Factors and Ergonomics in Healthcare Symposium*, March 5-8, New Orleans, Louisiana.

5. Hose, B.-Z., Carayon, P., Hoonakker, P., **Wooldridge, A. R.**, Ross, J., Kohler, J., Brazelton, T., Eithun, B., Kelly, M., Dean, S., Rusy, D., Gurses, A. (2017). Information Need of Physicians in Pediatric Trauma Care. *Human Factors and Ergonomics in Healthcare Symposium*, March 5-8, New Orleans, Louisiana.
6. **Wooldridge, A. R.**, Hoover, S. R., & Holman, G. T., (2013). "Evaluation of Current Simulation Methods in and their Impact in Healthcare." *Society for Health Systems Conference 2013*, March 1 – 4, New Orleans, Louisiana.
7. **Wooldridge, A. R.**, Kello, J., Mueller, M., (2011). "Using Simulation to Develop a Productivity Standard in a Pre-Admission Testing Department." *INFORMS 2011 Annual Meeting*, November 13 – 16, Charlotte, North Carolina.
8. Gentry, E., **Wooldridge, A. R.**, DePuy, G. W., (2011). "Applying the Analytical Hierarchy Process to Improving Patient Throughput Time." *Society for Health Systems Conference 2011*, February 17 – 20, Orlando, Florida.

Presentations at Local Conferences and Research Forums

1. *Hale-Lopez, K. L., *Angdoko, G. A., **Wooldridge, A. R.** (2021) Using SEIPS-based process modeling to design a mobile laboratory for SARS-CoV-2 diagnostic testing. *The Grainger College of Engineering Fall 2021 Engineering Research Fair*, September 30, 2021, Urbana, Illinois.
2. *Carvalho, C., *Yuceel, A. U., *Composto, A., Chronopoulou, A., **Wooldridge, A. R.** (2021) Monitoring Stress of Healthcare Workers at the Veterinary Diagnostic Laboratory. *The Grainger College of Engineering Fall 2021 Engineering Research Fair*, September 30, 2021, Urbana, Illinois.
3. **Mitchell, A., **Wooldridge, A. R.**, **Ramadhani, W., **Roychowdhury, J., Croland, T., Hanson, K., Melendez, E., Kendhari, L. Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K., Abbott, Z., Ebert-Allen, R. (2019) Evaluation of an Augmented Reality Code Cart Application Using Eye-Tracking Technology. *2019 Society for Hispanic Professional Engineers National Conference Engineering Science Symposium*, October 30 – November 3, Phoenix, Arizona. *Note: Won third place in poster competition.*
4. **Roychowdhury, J., **Wooldridge, A. R.**, **Ramadhani, W., **Mitchell, A., Croland, T., Hanson, K., Melendez, E., Kendhari, L. Shaikh, N., Riech, T., Mischler, M., Krzyzaniak, S., Barton, G., Formella, K., Abbott, Z., Ebert-Allen, R. (2019) Examining Perceived Usefulness of Features of an Augmented Reality (AR) Code Cart Education Application. *2019 iSchool Research Showcase*, October 30, 2019, Urbana, Illinois.
5. **Mitchell, A., **Wooldridge, A. R.**, **Ramadhani, W., **Roychowdhury, J. (2019) Evaluation of an Augmented Reality Code Cart Application Using Eye-Tracking Technology. *The Grainger College of Engineering Research Fair and International Research Symposium*, September 5, 2019, Urbana, Illinois.

6. *Burgard, M. & **Wooldridge, A. R.** (2019) Work System Factors Influencing Team Cognition in Handoffs. *The Grainger College of Engineering Research Fair and International Research Symposium*, September 5, 2019, Urbana, Illinois.
7. **Kaufman, M. L., **Wooldridge, A. R.**, Pionke, J. J. (2019) A Review of Human Factors Engineering Research to Address Health Inequity. *The Grainger College of Engineering Research Fair and International Research Symposium*, September 5, 2019, Urbana, Illinois.
8. **Wooldridge, A. R.**, Pascale Carayon, Peter Hoonakker, Bat-Zion Hose, Tom Brazelton, Ben Eithun, Joshua Ross, Jonathan Kohler, Michelle M. Kelly, Shannon Dean, Deborah Rusy, Ayse P. Gurses. (2018) A Macroergonomic Framework to Understand Team Cognition in Care Transitions. Johns Hopkins Symposium on Engineering in Healthcare, November 19, 2018, Baltimore, Maryland.
9. **Wooldridge, A. R.**, Pascale Carayon, Peter Hoonakker, Bat-Zion Hose, Tom Brazelton, Ben Eithun, Joshua Ross, Jonathan Kohler, Michelle M. Kelly, Shannon Dean, Deborah Rusy, Ayse P. Gurses. (2018) A Macroergonomic Framework to Understand Team Cognition in Care Transitions. *5th Health Care Engineering Systems Symposium and Interactive Medical Simulation Exposition*, September 17, 2018, Champaign, Illinois.
10. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P. L. T., Hose, B.-Z., Ross, J., Kohler, J., Brazelton, T., Eithun, B., Kelly, M., Dean, S., Rusy, D., Durojaiye, A. & Gurses, A. (2018) Complexity of the Pediatric Trauma Care Process: Understanding Patient Pathways. *National Academy of Engineering Regional Meeting and Symposium: Transforming Healthcare Through Engineering*, May 3, Madison, Wisconsin.
11. **Wooldridge, A. R.**, Carayon, P., Hoonakker, P. L. T., Hose, B.-Z., Ross, J., Kohler, J., Brazelton, T., Eithun, B., Kelly, M., Dean, S., Rusy, D., Durojaiye, A. & Gurses, A. (2018) Complexity of the Pediatric Trauma Care Process: Understanding Patient Pathways. *Wisconsin Institute for Healthcare Systems Engineering 2018 Conference*, May 2, Madison, Wisconsin.
12. McGeorge, N. M., Durojaiye, As. B., Fackler, J. C., Xie, A., Rosen, M. A., Hunt, E. A., Stewart, D., Puett, L. L., **Wooldridge, A. R.**, Carayon, P., Hoonakker, P., Gurses, A. P. (2016). Pediatric Trauma Care Transitions: Understanding Teamwork for Health IT Design. *Seventh Annual Johns Hopkins Medicine Patient Safety Summit: Working Together to Achieve Zero Preventable Harm*, October 2016, Baltimore, MD.
13. Cartmill, R., **Wooldridge, A. R.**, Cheema, S., Hoffmann, A., Steege, L., Du, S., Beasley, J., Hahn, D., Smith, P., Vidaver, R., Wetterneck, T. B. (2016). "The Complicated Application of GDTA to Primary Care." *I-Practise Annual Conference*, April 24-26, Madison, Wisconsin.
14. **Wooldridge, A. R.**, Carayon, P., Hundt, A. S., Cartmill, R., Hoonakker, P., Kianfar, S. (2016). "SEIPS-Based Workflow Modeling in Primary Care." *UW Resident and Student Quality Improvement Symposium*, April 14, Madison, Wisconsin.

15. **Wooldridge, A. R.**, Goldstein, R., (2006). “The Genetics of Familial Non-Medullary Thyroid Cancer,” *Junior Science and Humanities Symposium 2006*, Albuquerque, New Mexico.

Conference Papers and Abstracts Under Review

1. Sprackling, C. M., Kieren, M. Q., Nacht, C. L., Moreno, M. A., **Wooldridge, A. R.**, Kelly, M. M. Stakeholder perspectives of sharing clinician notes with teens. *Annual Medical Student Research Forum*, University of Wisconsin Medicine and Public Health.

Technical Reports

1. **Wooldridge, A. R.**, Mueller, M., Kello, J., (2011). Norton PAT Productivity Standard. Technical report performed for large regional hospital system.

Other Publications

1. **Wooldridge, A. R.** (2020) Human Factors and Health Equity During the Pandemic. HFES Health Care Technical Group Newsletter. August 2020, 30 (2). *Note: Invited contribution.*
2. Roscoe, R., Chiou, E., **Wooldridge, A. R.** (2018). Call for Book Chapters on Diversity, Inclusion and Social Justice. HFES Bulletin Newsletter. October 2017, 60(11).
3. Chiou, E., Roscoe, R., **Wooldridge, A. R.** (2017). HFES Diversity Committee 2017 Annual Meeting Wrap-Up. HFES Bulletin Newsletter. October 2017, 61(18).

INVITED PRESENTATIONS

External Presentations

- | | |
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| 2022 | “Modeling interactions in complex health care sociotechnical systems: Challenges and opportunities for improving pediatric patient safety,” University of Wisconsin-Madison, Madison, Wisconsin, January 13. |
| 2021 | The Bellwether Problem: Publishing the First QE Studies in a New Field, International Society for Quantitative Ethnography, Webinar Series, May 3, 2021 |
| 2021 | “Debating Inclusion Practices in Human Factors,” HFES Inter-University Workshop, University at Buffalo, State University of New York, Buffalo, New York, April 10, 2021. |

- 2021 “Traversing a Winding Trail: My Career Path Across Industrial Engineering in Industry and Academia,” Graduate Student Seminar, University of Louisville, Louisville, Kentucky, February 26, 2020.
- 2021 “Human Factors and Quantitative Ethnography: Exploring Interactions to Improve Systems,” International Conference on Quantitative Ethnography 2020 Keynote Address, Virtual Conference January 21 – February 2, 2021.
- 2020 “Barriers and Facilitators in Trauma Care Transitions: Implications for Work System Design,” Human Factors in Engineering, Stevens Institute of Technology, Hoboken, New Jersey, October 5, 2020
- 2019 “Further Fields: Introducing Quantitative Ethnography to New Academic Disciplines and Research Areas,” 1st International Conference on Quantitative Ethnography, Madison, Wisconsin, October 20.
- 2011 “Norton PAT Productivity Standard.” *Norton Audubon and Norton Healthcare Network Management*, Louisville, Kentucky, April 26.

University of Illinois Invited Presentations

- 2022 “Understanding and Using the Systems Engineering Initiative for Patient Safety (SEIPS) Model,” Innovation, Design, Engineering and Analysis (IDEA) course, Carle Illinois College of Medicine, Urbana, Illinois, January 21.
- 2021 Designing Sociotechnical Systems to Support Teams in Health Care and Health-Related Context, Master of Health Technology Speaker Series, October 22.
- 2021 Industrial and Systems Engineering in COVID-19 Response: Design and Development of Mobile Laboratories, Industrial and Enterprise Systems Engineering Seminar Series, September 10.
- 2021 COVID-19 Research Lightning Talk: mobile SHIELD and sociotechnical system design for teams during pandemics, Campus Research Administrators Working Group, June 4.
- 2021 “What is human factors/ergonomics and why does it matter?” Carle Illinois College of Medicine First Year Students Brown Bag, Carle Illinois College of Medicine, Urbana, Illinois, April 8.
- 2021 One Way the Pandemic Improved My Teaching: Designing Usable Classes for Connectedness, Academy for Excellence in Engineering Education Spring 2021 Lightning Symposium, March 30, 2021.
- 2020 MobileShield, Grainger College COVID-19 Research-Driven Initiatives Webinar, November 12, 2020.

- 2020 “Understanding and Using the Systems Engineering Initiative for Patient Safety (SEIPS) Model,” Innovation, Design, Engineering and Analysis (IDEA) course, Carle Illinois College of Medicine, Urbana, Illinois, May 29.
- 2020 “Using Epistemic Network Analysis in Human Factors Research” Human Factors & Aging Laboratory, University of Illinois at Urbana-Champaign, Urbana, Illinois, April 27.
- 2020 “What is human factors/ergonomics and why does it matter?” Carle Illinois College of Medicine First Year Students Brown Bag, Carle Illinois College of Medicine, Urbana, Illinois, April 17.
- 2019 “Using Simulation to Evaluate and Improve Team Cognition in Handoffs,” 6th Health Care Engineering Systems Symposium and Interactive Medical Simulation Exposition, University of Illinois, October 9.
- 2019 “What is human factors/ergonomics and why does it matter?” Carle Illinois College of Medicine First Year Students Brown Bag, Carle Illinois College of Medicine, Urbana, Illinois, April 12.
- 2019 “Human Factors Approaches to Improving Care Transitions: A Macroergonomic Approach to Team Cognition,” 2018-2019 Kinesiology and Community Health Colloquium, Kinesiology and Community Health, University of Illinois at Urbana-Champaign.
- 2016 “Communication in the Wild: The Use of Epistemic Network Analysis to Study Task-Allocation Communication in a Primary Care Team,” Center for Quality and Productivity Improvement, University of Wisconsin – Madison, June 24.
- 2012 “The Simulation of a Primary Care Team,” Center for Quality & Productivity Improvement, University of Wisconsin – Madison, February 10.
- 2011 Simulation of the Walk-Up Portion of H1N1 Vaccination Clinic.” Real-time decision support system for healthcare and public health faculty, University of Louisville, Kentucky, September 6.

TEACHING AND MENTORING

Graduate Classroom Instruction

- Fall 2021 Job and Organization Design (3 credit hours for undergraduates in IE 498, 4 credit hours for graduates in IE 598, lecture). Class size: 7 students. University of Illinois at Urbana-Champaign.

- Fall 2020 Field Research in Health Care (IE 598, 4 credit hours, lecture, online).
Class size: 5 students. University of Illinois at Urbana-Champaign.
ICES Scores: Overall teaching effectiveness = 4.6; Overall quality of course = 4.6 (scales: 1-5).
Included on “List of Teachers Ranked as Excellent by Their Students.”
- Fall 2020 Job and Organization Design (IE 598, 4 credit hours, lecture, online).
Class size: 7 students. University of Illinois at Urbana-Champaign.
ICES Scores: Overall teaching effectiveness = 4.83; Overall quality of course = 5.0 (scales: 1-5).
Included on “List of Teachers Ranked as Excellent by Their Students.”
- Fall 2019 Job and Organization Design (3 credit hours for undergraduates in IE 498, 4 credit hours for graduates in IE 598, lecture). Class size: 6 students (2 in IE 498, 4 in IE 58). University of Illinois at Urbana-Champaign. ICES Scores: Overall teaching effectiveness = 4.5 (IE 498), 4.7 (IE 598); Overall quality of course = 5.0 (IE 498), 4.7 (IE 598) (scales: 1-5).
Too small for “List of Teachers Ranked as Excellent by Their Students.”
- Fall 2016 Job and Organization Design, grader and lecturer. I taught three lectures on questionnaire design, job rotation, enlargement and enrichment and teamwork (September 28, October 3, November 14). Professor: Pascale Carayon. Class size: 20 students. University of Wisconsin – Madison, Madison, Wisconsin.

Undergraduate Classroom Instruction

- Spring 2022 Human Factors (IE 340 and PSYC 358, 4 credit hours, lecture and lab).
Class size: 79 students. University of Illinois at Urbana-Champaign. *Note: Graduate level version offered as independent study with more rigorous laboratory and individual project assignments.*
- Spring 2021 Human Factors (IE 340 and PSYC 358, 4 credit hours, lecture and lab, online). Class size: 73 students. University of Illinois at Urbana-Champaign.
ICES Scores: Overall teaching effectiveness = 3.84; Overall quality of course = 4.0 (scales: 1-5).
- Spring 2020 Human Factors (IE 340 and PSYC 358, 4 credit hours, lecture and lab).
Class size: 57 students. University of Illinois at Urbana-Champaign.
ICES Scores: Overall teaching effectiveness = 4.64; Overall quality of course = 4.59 (scales: 1-5).
Included on “List of Teachers Ranked as Excellent by Their Students.”
- Spring 2019 Human Factors (IE 340 and PSYC 358, 4 credit hours, lecture and lab).
Class size: 45 students. University of Illinois at Urbana-Champaign.

ICES Scores: Overall teaching effectiveness = 4.6; Overall quality of course = 4.4 (scales: 1-5).
Included on “List of Teachers Ranked as Excellent by Their Students.”

Guest Lectures

Fall 2021 SE 100: Introduction to ISE. I taught one lecture introducing human factors. Professor: Girish Krishnan. Class size: 125 students.

Fall 2018 CHLH 456: Organization of Health Care. I taught one lecture introducing human factors. Professor: Kristen DiFilippo. Class size: 45 students. University of Illinois at Urbana-Champaign.

Fall 2011 Biomedical Engineering Course on Economics Ethics and FDA Regulations. I taught one lecture on project management and Microsoft Project (September 1). Professors: Robert Keynton and John Usher. Class size: 24 students. University of Louisville, Louisville, Kentucky

Course Development

IE 441: Work and Organization Design (3 or 4 credit hours). Proposed to Department Courses and Curriculum Committee, Spring 2021. Under review by College Courses and Curriculum committee, Fall 2021.

Graduate Student Mentoring

PhD Advisees:

Emma Mayes, PhD Advisee and Research Assistant, 2021 – Present
Data Science for All/Women cohort, Fall 2021

Carolina Carvalho Manhães Leite, PhD Advisee and Research Assistant, 2020 – Present

Kaitlyn Hale-Lopez, PhD Advisee and Research Assistant, 2020 – Present
Winner of Health Care Technical Group Student Travel Grant, HFES 2021 Annual Meeting
Winner of Health Care Technical Group Marilyn Sue Bogner Student Paper Award, 2021
Selected to attend NextProf Pathfinder, 2021

Qualifying Exam Committee Member:

Parth Bansal, Industrial and Enterprise Systems Engineering, 2021
Zheng Liu, Industrial and Enterprise Systems Engineering, 2021

Master's Thesis Committee Member:

Taylor Tucker, Curriculum and Instruction, 2021

External Examination:

Jason Card, MSc in Human Kinetics and Ergonomics, Rhodes University, 2020.
Thesis: "An Ergonomics Approach to Understanding Perceived Barriers to the Provision of High-Quality Healthcare: A Sarah Baartman District Clinics Case Study"

Other:

Ryan Santens, PhD Student and Research Assistant, 2021 – Present
Talia Scheck-Long, MS Student and Research Assistant, 2020 – Present
Amrutha Kumaran, MS in Health Technology Capstone, 2020-2021
Rory (Alina) Lusebrink, PhD Student and Research Assistant, 2020 – 2021
Brittany (Sondria) Cottrell, PhD Student and Research Assistant, 2020 – 2021
Widya Ramadhani, PhD Student and Research Assistant, 2019 – 2021
Winner of Health Care Technical Group Student Travel Grant,
HFES 2020 Annual Meeting
Emily Heuck, MS Student and Research Assistant, 2019 – 2021
Winner of Health Care Technical Group Student Travel Grant,
HFES 2020 Annual Meeting
Jyotika Roychowdhury, MS Student and Research Assistant, 2019
Sadia Ashrafi, PhD Student and Research Assistant, 2019
Bat-Zion Hose, PhD Student and Research Assistant, 2016 – 2018
Megan Salwei, PhD Student and Research Assistant, 2016 – 2018
Jordan Ramsey, MS Student and Project Assistant, 2017 – 2018
Janette Garcia, MBA Student and Database Analyst, 2014 – 2015

Undergraduate Student Mentoring

Irem Yuceel, Undergraduate Research Assistant, 2021 – Present
Research Experience for Undergraduates, Fall 2021: "Monitoring Stress and Burnout"
Kristen Whalen, Bachelor of Arts Thesis Advisee, 2021 – Present
Gary Angdoko, Undergraduate Research Assistant, 2021
Research Experience for Undergraduates, Summer 2021: "Discrete Event Simulation for Capacity Assessment and Improvement of the mobileSHIELD COVID-19 Laboratory"
Mia Spiwak, Undergraduate Research Assistant, 2019 – 2021
John Morgan, Undergraduate Research Assistant, 2019 – 2020

Research Experience for Undergraduates, Fall 2019: “Analyzing the Usability and Satisfaction for Code Cart Application”

Research Experience for Undergraduates, Fall 2020: “Network Analysis to Investigate Relationships Between Work System Barriers and Facilitators”

Winner of Health Care Technical Group Student Travel Grant, HFES 2020 Annual Meeting

Winner of Health Care Technical Group Marilyn Sue Bogner Student Paper Award, 2020

Anthony Composto, Undergraduate Research Assistant, 2019 – Present

Research Experience for Undergraduates, Fall 2019: “Evaluating the Efficacy of a Mobile, Augmented Reality Education Application Using Eye Tracking Data”

Research Experience for Undergraduates, Spring 2021: “Piloting Wearable Sensors to Predict Occupational Stress and Burnout”

Ashley Mitchel, Undergraduate Research Assistant, 2019 – Present

Ariel Alexander, Undergraduate Research Assistant, 2019 – 2020

McNair Scholars Capstone: “We Can’t Design for All Humans if We Only Understand Some Humans”

Maya Burgard, Undergraduate Research Assistant, 2018 – 2020

RuthAnn Haefli, Undergraduate Research Assistant, 2018 – 2019

Research Experience for Undergraduates, Fall 2018: “Comparing Care Transition Outcomes in Pediatric and Adult Trauma Patients”

Katherine Schroeer, Undergraduate Research Assistant, 2017 – 2018

Senior Design Projects

Fall 2021 Tangle Free Dog Leash Ergonomic and Safety Design Improvements – Barrington High School Dogware

Spring 2021 Book Block Layout and Material Handling Optimization – R & R Bindery Service, Inc.

Fall 2019 Analysis for Cost-Effective Improvement of Transportation Services – Clark-Lindsey Village

Carle Illinois Medicine Capstone Projects

2021 Breasy Project Proposal: A Novel Approach to Incentive Spirometer Design

SERVICE

Professional Societies

Human Factors and Ergonomics Society
 Institute of Industrial and Systems Engineers
 International Society for Quantitative Ethnography
 Institute for Operations Research and the Management Sciences (previous member)
 Tau Beta Pi Engineering Honors Society
 Alpha Pi Mu

Professional Service

2021 – 2023	Chair, Human Factors and Ergonomics Society Diversity and Inclusion Committee
2021 – 2023	Member, Human Factors and Ergonomics Society Membership Committee
2021 – 2023	Member, Human Factors and Ergonomics task force to rename awards
2021 – 2023	Human Factors and Ergonomics Society Healthcare Technical Group Chair-Elect (Chair term: 2023 – 2025)
2021	Panelist, NSF SBIR/STTR Phase 1: Personalized and Mental Health Digital Interventions
2021	Quantitative Ethnography Community 2021 Data Challenge Team Mentor
2020 – Present	Member of International Ergonomics Association K. U. Smith Award Committee
2020	Reviewer, International Conference on Quantitative Ethnography 2020
2020	Chair, Doctoral Consortium, International Conference on Quantitative Ethnography 2020
2020	Quantitative Ethnography Community COVID Data Challenge Planning Group
2020	Quantitative Ethnography Community COVID Data Challenge Team Mentor
2020	Panelist, NSF Smart and Connected Health
2019 – 2021	Human Factors and Ergonomics Society Healthcare Technical Group Secretary/Treasurer
2018 – Present	Human Factors and Ergonomics Society Societal Impact Committee Member; lead of conference panel subcommittee (2019-2020)
2018 – 2019	Conference Committee Member, International Conference on Quantitative Ethnography
2017 – Present	Human Factors and Ergonomics Society Diversity Committee Member: Lead of conference annual meeting programming subcommittee (2018-2019)

	HFES Seed Grants Targeting the Intersections of HF/E and Anti-Racism/Anti-Bias subcommittee member (2020-2021)
2013 – 2014	Tau Beta Pi Inaugural Student Advisory Board Member
2011 – 2012	Tau Beta Pi Chapter President, Convention Delegate
2011	Tau Beta Pi National Awards Committee Chair
2011 – 2012	Alpha Pi Mu Chapter Vice-President
2011 – 2012	Institute for Operations Research and the Management Sciences Chapter Secretary

Editorial Activities

2021 – Present	<i>Ergonomics</i> , Editorial Board Member
2021 – Present	<i>Human Factors in Healthcare</i> , Editorial Board Member
2021 – Present	<i>Value in Health</i> , Reviewer
2020 – Present	International Ergonomics Association Triennial Congress, Healthcare Ergonomics Technical Committee Reviewer
2019 – Present	<i>JAMIA Open</i> , Reviewer
2019 – Present	International Conference on Quantitative Ethnography Reviewer
2019 – Present	<i>BMJ Quality & Safety</i> , Reviewer
2018 – Present,	<i>International Journal of Medical Informatics</i> , Reviewer
2018 – Present	<i>Ergonomics</i> , Reviewer
2018 – Present	<i>Applied Ergonomics</i> , Reviewer
2018 – Present	<i>Applied Clinical Informatics</i> , Reviewer
2018 – Present	<i>Cognition, Technology and Work</i> , Reviewer
2018 – Present	<i>Research in Social and Administrative Pharmacy</i> , Reviewer
2017 – Present	<i>IIE Transactions on Healthcare Systems Engineering</i> (formerly <i>IIE Transactions on Healthcare Systems Engineering</i>), Reviewer
2017 – Present	Human Factors and Ergonomics Society Healthcare Technical Group Student Paper Competition Reviewer
2016 – Present	Human Factors and Ergonomics Society Annual Meeting Reviewer

Conferences, Panels and Symposia (organizer)

2021	Chair, Improving Health Through the Application of Ergonomics to Food Practices, Human Factors and Ergonomics 2021 Annual Meeting
2021	Chair, Being Bold: How HFES Can Encourage Responsible, Timely and Participative Ergonomics to Address Societal Issues, Human Factors and Ergonomics 2021 Annual Meeting
2021	Chair, COVID-19_4, International Ergonomics Association Triennial Congress

- 2020 Chair, Designing for Diversity: Implications for Research and Practice, Human Factors and Ergonomics 2020 Annual Meeting
- 2019 Chair, HFE in Diversity, Inclusion and Social Justice: A Practical Primer, Human Factors and Ergonomics 2019 Annual Meeting
- 2018 Chair, Human Factors and Ergonomics in Diversity, Inclusion and Social Justice Research, Human Factors and Ergonomics Society 2018 Annual Meeting
- 2018 Co-chair, Improving Care Transitions in Healthcare: A Human Factors Approach, Human Factors and Ergonomics Society 2018 Annual Meeting
- 2017 Co-chair, The Diversity Committee: Challenges and Opportunities for Involvement, Human Factors and Ergonomics Society 2017 Annual Meeting
- 2017 Co-chair, Tools, Technologies, and Provider Performance, Human Factors and Ergonomics Society 2017 Annual Meeting
- 2017 Panel Organizer, Designing and Managing Healthcare Transitions, ACE-ODAM 2017
- 2016 Co-chair, Macroergonomics Across Domains, Human Factors and Ergonomics Society 2016 Annual Meeting

University of Illinois at Urbana-Champaign Service

- 2021 – 2022 Member, Director of the Health Care Engineering Systems Center Search Committee, The Grainger College of Engineering
- 2021 Participant, The Grainger College of Engineering Leadership Retreat, Fall 2021
- 2021 ISE Graduate Student Lunch and Learn, October 20.
- 2021 Capstone Sponsor, Master's in Health Technology, University of Illinois at Urbana-Champaign
- 2021 Reviewer for Grassroots Initiatives to Address Needs Together (GIANT) grant proposals, Institute for Inclusion, Diversity, Equity and Access (IDEA) Institute, Grainger College of Engineering, University of Illinois at Urbana-Champaign
- 2021 Participant, The Grainger College of Engineering Leadership Retreat; Bridging the Social Divide Breakout Group, Spring 2021
- 2020 – 2021 Faculty Meeting Secretary, Industrial and Enterprise Systems Engineering
- 2020 CEE 435: Public Health Engineering Course Proposal Evaluation Subcommittee
- 2020 Co-organizer and contributor to Summer ISE Incoming Freshman Program (a retention effort)

- 2019 – Present Member, Graduate Program Committee, Industrial and Enterprise Systems Engineering
- 2019 – 2020 Member, Department Head Search Committee, Industrial and Enterprise Systems Engineering
- 2019 – 2020 Member, Associate or Full Professor of Health Technology Search Committee, Kinesiology and Community Health
- 2019 Participant, The Grainger College of Engineering Leadership Retreat
- 2019 ISE Representative, New Student Convocation
- 2019 Developed Human Factors/Ergonomics Track Option
- 2019 – 2020 Faculty Meeting Secretary, Industrial and Enterprise Systems Engineering
- 2019 Member, Assistant Director of Research for the Living in Interactive Future Environments (LIFE) Home Search Committee
- 2018 – 2019 Member, Undergraduate Program Committee, Industrial and Enterprise Systems Engineering
- 2018 UW Educational Environment in Engineering (E3) Survey Graduate Student Task Force, Member
- 2010 – 2011 University of Louisville Speed School of Engineering Committee to Review Industrial Engineering Department Chair Member
- 2011 Presenter for Engineering Lab Demonstration, Speed School of Engineering Career Days

Extracurricular Service

- 2019 – Present Chapter Advisor, HFES Student Chapter at University of Illinois at Urbana-Champaign

Outreach Activities

- 2022 ISE Coordinator for Grainger College of Engineering Recruitment and Outreach Summer Camps
- 2021 Presenter, Virtual Alumni Event, April 21.
- 2021 Presenter, ISE Virtual Information Days for Prospective Students, March 2.
- 2020 Lead, mobileSHIELD, Grainger College of Engineering, University of Illinois at Urbana-Champaign, Discovery Partners Institute, Veterinary Diagnostic Laboratory. <https://grainger.illinois.edu/news/features/illinois-mobile-shield>
- 2020 Grainger College COVID-19 Research-Driven Initiatives Webinar, November 12, 2020.

- 2020 COVID-19 Response Panel, Bioengineering Section of What It Takes Camp, University of Illinois at Urbana-Champaign, July 15, 2020
- 2020 COVID-19 Response Panel, Bioengineering Section of What It Takes Camp, University of Illinois at Urbana-Champaign, July 1, 2020
- 2020 Member, User Experience Sub-Team, Illinois RapidVent Team, Grainger College of Engineering and Carle College of Medicine
- 2019 Welcome to ISE (WISE) Department Orientation
- 2019 Industrial and Enterprise Systems Engineering Department, Exploring Your Options 2, Survey of Engineering Camp, University of Illinois at Urbana-Champaign, June 28, 2019
- 2019 Industrial and Enterprise Systems Engineering Department, Exploring Your Options 1, Survey of Engineering Camp, University of Illinois at Urbana-Champaign, June 21, 2019
- 2019 Industrial and Enterprise Systems Engineering Department Introduction, Uni High Summer Enrichment Camp, University Laboratory High School, June 5, 2019
- 2019 Presenter, May 2019 Advisory Board Meeting

Health System Innovation and Quality Improvement Activities

- 2013 – 2015 Member, Anne Bates Leach Eye Hospital Quality Assessment and Improvement Committee
- 2013 – 2015 Member, Anne Bates Leach Eye Hospital Operating Room Efficiency Committee

DIVERSITY, EQUITY AND INCLUSION ACTIVITIES

- 2021 – Present Chair, Diversity and Inclusion Committee, Human Factors and Ergonomics Society
- 2020 – Present Core Member, Institute for Inclusion, Diversity, Equity and Access (IDEA) Institute, Grainger College of Engineering, University of Illinois at Urbana-Champaign
- 2020 Chair, Designing for Diversity: Implications for Research and Practice, Human Factors and Ergonomics 2020 Annual Meeting
- 2019 Chair, HFE in Diversity, Inclusion and Social Justice: A Practical Primer, Human Factors and Ergonomics 2019 Annual Meeting
- 2018 Chair, Human Factors and Ergonomics in Diversity, Inclusion and Social Justice Research, Human Factors and Ergonomics 2018 Annual Meeting
- 2018 Empowering People to Break the Prejudice Habit: Creating Inclusion and Overcoming Bias, University of Wisconsin-Madison, April 4.

- 2018 – Present Societal Impact Committee Member, Human Factors and Ergonomics Society
- 2017 – Present Diversity Committee Member, Human Factors and Ergonomics Society
- 2017 Teaching Inclusively, Center for the Integration of Research, Teaching and Learning (CIRTL) Online Event, CIRTL Network
- 2017 Co-chair, The Diversity Committee: Challenges and Opportunities for Involvement, Human Factors and Ergonomics Society 2017 Annual Meeting
- 2017 Selected to attend NextProf Fall Engineering Workshop focusing on increasing diversity in the academy, University of Michigan, September 26 – 29.

MEDIA COVERAGE

1. [WEEK.COM NBC 25 — August 10, 2020](#) — University of Illinois working to expand COVID-19 saliva testing nationally
2. [CBS 2 Chicago — August 19, 2020](#) — FDA Approves ‘Game Changing’ COVID-19 Saliva Test Developed At The University Of Illinois
3. [WILL — August 19, 2020](#) — U Of I’s Saliva-Based COVID-19 Test Receives FDA Emergency Authorization
4. [The St. Louis American — August 22, 2020](#) — COVID-19 saliva test allows three U. of I campuses to open in-person
5. [Insider — August 26, 2020](#) — The University of Illinois COVID-19 testing plan is so aggressive that it accounts for 20% of the state's tests
6. [Crain’s Chicago Business — August 31, 2020](#) — Why the University of Illinois’ COVID test may have legs
7. [WLSB — September 3, 2020](#) — Durbin, Duckworth, LaHood & Davis Pen Letter to HHS To Deploy U of I Saliva-Based COVID Rapid Test
8. [The Daily Herald — September 9, 2020](#) — When will U of I’s saliva test see wider rollout
9. [WQAD 9 ABC — September 17, 2020](#) — University of Illinois to expand saliva-based COVID-19 testing platform nation-wide
10. [JAVMA News — September 30, 2020](#) — University of Illinois creates rapid saliva test for COVID-19 virus
11. [Chicago Sun Times — October 6, 2020](#) — To get out of this mess, we need bold thinking. Here’s what city leaders should do
12. [C&EN — November 1, 2020](#) — How one university built a COVID-19 screening system
13. [WMTV — November 5, 2020](#) — UW Madison to expand COVID-19 testing this spring
14. [WCIA — November 6, 2020](#) — Mobile laboratory able to “rapidly deploy” U of I’s saliva-based COVID-19 test

15. [The Doctors – November 6, 2020](#)— Breakthrough COVID Testing Developed?
16. [The News Gazette — November 25, 2020](#) — 'The SHIELD program lets us see the whole iceberg, not just the tip'
17. [Chicago Tribune — December 4, 2020](#) — University of Illinois' COVID-19 saliva test reaches 1 million mark
18. [ABC 7 News — December 12, 2020](#) — Bloom Energy in San Jose builds new lab to expand COVID-19 testing
19. [Business Wire — December 14, 2020](#) — Bloom Energy and El Camino Health Deploy Shield T3 to Curb COVID-19
20. [NASDAQ — December 14, 2020](#) — Bloom Energy and El Camino Health Deploy Shield T3 to Curb COVID-19
21. [Patch — December 15, 2020](#) — University Of Illinois' SHIELD Test Could Be Used At Other Colleges In Illinois
22. [Illinois Newsroom — December 25, 2020](#) — U Of I Needs FDA Authorization To Expand Access To COVID-19 Testing In Illinois
23. [WCIA — December 26, 2020](#) — SHIELD Illinois testing to expand to Northern Illinois University
24. [The Chicago Tribune – January 5, 2021](#) — University of Illinois' COVID-19 saliva test moves closer to FDA approval, but not fast enough to meet the demand: 'Every school district in Illinois would love to have this'

PROFESSIONAL TRAINING AND DEVELOPMENT

Spring 2022	NIH Writing Club, Meg Bouvier Medical Writing and Grainger College of Engineering, February – June.
12/14/2021	NIH Faculty Researcher Successes panel, Grainger College of Engineering.
12/20/2021	Workshop for Assistant Professors – Constructing a Holistic Teaching Dossier for Promotion and Tenure, University of Illinois at Urbana-Champaign.
2021 – 2022	Grainger Engineers Accelerating Research, Grainger College of Engineering
Spring 2021	DoD Grant Seeking Workshop, IHSI, University of Illinois at Urbana-Champaign, January 27, February 3 and 10, 2021
04/06-08/2020	2020 CISE CAREER Proposal Writing Workshop, Computer and Information Science and Engineering, National Science Foundation, virtual conference.
Summer 2020	Grainger Teaching Academy, Leaning into 2020 Activity #3: Assessment Activities

- Spring 2020 NSF CAREER Workshops #1 (2/6), #2 (4/1) and mock panel review (5/21), Office of Research, Grainger College of Engineering, University of Illinois at Urbana-Champaign
- 01/06-07/2020 2020 Advancing Health Through Science Workshop, National Science Foundation, Alexandria, Virginia. *Note: Attended as an Aspiring PI Awardee; this workshop is part of the Smart and Connected Health Program.*
- Fall 2019 Finding and Engaging with Funding Sources Program Grainger Cohort (September – November, 2019), Office of Research, Grainger College of Engineering, University of Illinois at Urbana-Champaign
- 03/27-28/2019 Big Ten’s Women’s Workshop for Junior Faculty, Big Ten Academic Alliance.
- Fall 2018 NIH Grant Writing Series, Interdisciplinary Health Sciences Institute, University of Illinois at Urbana-Champaign.
- 2018-2019 Collins Scholars Program, Academy for Excellence in Engineering Education, University of Illinois at Urbana-Champaign.
- 06/21/2018 Faculty Advising: What you Need to Know and How to Do It Well, Delta Program for Research, Teaching and Learning University of Wisconsin-Madison.
- 04/04/2018 Empowering People to Break the Prejudice Habit: Creating Inclusion and Overcoming Bias, University of Wisconsin-Madison.
- 12/05/2017 Teaching Inclusively, Center for the Integration of Research, Teaching and Learning (CIRTL) Online Event, CIRTL Network.
- 09/26-29/2017 NextProf Fall Engineering Workshop focusing on increasing diversity in the academy, University of Michigan.
- 12/02/2016 Active Teaching with Technology, UW-Madison Teaching Academy, University of Wisconsin-Madison.
- 10/04/2016 Tailoring Teaching Strategies to Optimize Student Engagement: Large Versus Small Classrooms, UW-Madison Teaching Academy, University of Wisconsin-Madison.
- 09/28/2016 Addressing Student Behaviors: A Range of Approaches and Outcomes, UW-Madison Teaching Academy, University of Wisconsin-Madison.
- 08/17/2017 Enhancing STEM Communication through Improv, Delta Program for Research, Teaching and Learning, University of Wisconsin-Madison.
- 08/23-24/2016 UW-Madison: The Teaching Assistant Learning Environment and Pedagogics Program, UW-Madison Teaching Academy, University of Wisconsin-Madison.
- 04/09/2011 Passed the Fundamentals of Engineering Exam.