

SARA L. RIGGS

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EDUCATION

- 2014 **Ph.D.** Industrial and Operations Engineering, University of Michigan, Ann Arbor, MI

Dissertation Title: *Tactile and Crossmodal Change Blindness and their Implications for Display Design* (Advisor: Dr. Nadine Sarter)
- 2011 **M.S.E.** Industrial and Operations Engineering, University of Michigan, Ann Arbor, MI
- 2009 **B.S.** Industrial and Systems Engineering (Business Minor), Virginia Polytechnic Institute and State University, Blacksburg, VA
- 2009 **B.A.** Economics, Virginia Polytechnic Institute and State University, Blacksburg, VA

EMPLOYMENT

Assistant Professor, Industrial Engineering, Clemson University August 2014 – Present

AFFILIATIONS AND APPOINTMENTS

Faculty Scholar, Clemson University School of Health Research 2015 – Present

Embedded Scholar, Institute for Advancement of Health Care (IAHC) 2015 – Present

Associate, Human Factors Institute 2014 – Present

PUBLICATIONS AND PRESENTATIONS

Underline indicates Riggs Lab student

Peer-Reviewed Journal Articles

1. **Riggs, S.** & Sarter, N. (Accepted, pending rebuttal). Tactile, visual, and crossmodal visual-tactile change blindness: The effect of transient type and task demands. Submitted to *Human Factors*.
2. **Riggs, S.**, Wickens, C., Sarter, N., Thomas, L., Nikolic, M., & Sebok, A. Multimodal information presentation in support of NextGen operations. (2017). *The International Journal of Aerospace Psychology*, 27(1-2), 29-43.
3. Gildersleeve, R., **Riggs, S.L.**, Cherňavsky, D.R., DeBoer, M.D. (2017). Improving the safety and functionality of an artificial pancreas system for use in young children: Input from parents and physicians. *Diabetes Technology and Therapeutics*, 19(11), 660-674.
4. **Riggs, S.** & Sarter, N. (2016). The development and evaluation of countermeasures to tactile change blindness. *Human Factors*, 58, 482-495.
5. Pitts, B., **Riggs, S.**, & Sarter, N. (2016). Crossmodal matching: A critical but neglected step in multimodal research. *IEEE Transactions on Human-Machine Systems*, 46(3), 445-450.

6. **Lu, S.**, Wickens, C., Prinet, J., Hutchins, S., Sarter, N., & Sebok, A. (2013). Supporting interruption management and multimodal interface design: Three meta-analyses of task performance as a function of interrupting task modality. *Human Factors*, 55, 697-724.
 - Finalist for Jerome H. Ely Human Factors Article Award (best paper published in previous year's volume)
 - Most read article (full-text/pdf views) for August 2013, #8 for July 2013
7. Moacdieh, N., Devlin, S., Jundi, H., & **Riggs, S.L.** (3rd Round Revision). Effects of workload and workload transitions on performance and attention: Evidence from eye tracking metrics. Submitted to *Human Factors*.
8. Devlin, S., Moacdieh, N., Wickens, C.D., & **Riggs, S.L.** (2nd Round Revision). Workload transitions: The effect of gradual and sudden shifts from low to high workload on task performance. Submitted to *Human Factors*.
9. Gomes, K. & **Riggs, S.L.** (2nd Round Revision). Evaluating methods of crossmodal matching of multimodal displays in younger and older adults. Submitted to the *International Journal of Human - Computer Studies*.
10. Gomes, K., Betza, S., & **Riggs, S.L.** (2nd Round Revision). Now you feel it, now you don't: The effect of movement, cue complexity, and body location on tactile change detection. Submitted to *Human Factors*.
11. Gomes, K., Reeves, S., & **Riggs, S.L.** (Under Review). The utility of tactile parameters in support of continuous monitoring for anesthesia providers in the operating room. Submitted to *Applied Ergonomics*.
12. Cull, J., Riggs, R., **Riggs, S.**, Byham, M., Witherspoon, M., Baugh, N., Metcalf, A., Kitchens, D., & Manning, B. (Under Review). Development of trauma level prediction models using emergency medical service vital signs to reduce over- and under-triage rates in penetrating wounds and falls of the elderly. Submitted to *Journal of Trauma and Acute Care Surgery*.

Peer Reviewed Conference Proceedings

1. Devlin, S. & **Riggs, S.L.** (Accepted). The effect of video game experience and the ability to handle workload and workload transitions. Accepted to the *Proceedings of the 62th Annual Meeting of the Human Factors and Ergonomics Society*. Philadelphia, PA. October.
2. Devlin, S., Flynn, J., & **Riggs, S.L.** (Accepted). Connecting the Big Five taxonomies: Understanding how individual traits contribute to team adaptability under workload transitions. Accepted to the *Proceedings of the 62th Annual Meeting of the Human Factors and Ergonomics Society*. Philadelphia, PA. October.
3. Gomes, K., Reeves, S., & **Riggs, S.L.** (Accepted). The "up-side" and "down-side" of tactile parameters: An evaluation of increases and decreases in tactile cue magnitude to support anesthesia monitoring. Accepted to the *Proceedings of the 62th Annual Meeting of the Human Factors and Ergonomics Society*. Philadelphia, PA. October.
4. Betza, S., Reeves, S., Abernathy, J., & **Riggs, S.L.** (2017). The effect of movement and cue complexity on tactile change detection. In *Proceedings of the 61th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1541-1545). Austin, TX. October.
5. Devlin, S. & **Riggs, S.L.** (2017). Analyzing eye tracking data using a Markovian framework to assess differences in scan patterns. In the *Proceedings of the 61th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1814-1818). Austin, TX. October.
6. Gomes, K. & **Riggs, S.L.** (2017). Analyzing visual search techniques using eye tracking for a computerized provider order entry (CPOE) task. In *Proceedings of the 61th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 691-695). Austin, TX. October.
7. Gomes, K. & **Riggs, S.L.** (2017). The effect of age on crossmodal matching using auditory frequency. Accepted to the *Proceedings of the 61th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1552-1556). Austin, TX. October.

8. Gomes, K. & **Riggs, S.L.** (2016). Crossmodal matching: A comparison of two methods. In *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1595-1599). Washington, D.C. September.
 - Winner of the Perception and Performance Technical Group Best Student Paper Award
9. Betza, S., Jurewicz, K., Neyens, D., **Riggs, S.L.**, Abernathy, J.H., & Reeves, S.T. (2016). Anesthesia maintenance and vigilance: Examining task switching. In *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 608-612). Washington, D.C. September.
10. **Lu, S.** & Sarter, N. (2014). Tactile change blindness in an Unmanned Aerial Vehicle control task. In *Proceedings of the 58th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1706-1710). Chicago, IL. October.
11. **Lu, S.**, Nemshak, M., Schumacher, R., & Seagull, F.J. (2013). Identifying, quantifying, and projecting single-day quality measures within the neonatal ICU. In *Proceedings of the 57th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1760-1764). San Diego, CA. September.
12. **Lu, S.** (2013). Modeling Attention-Deficit Hyperactivity Disorder (ADHD) under a dual task paradigm using a Markovian framework for ADHD diagnosis. In *Proceedings of the 57th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 798-802). San Diego, CA. September.
13. Pitts, B., **Lu, S.**, & Sarter, N. (2013). Crossmodal matching: The development and evaluation of a new technique. In *Proceedings of the 57th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1760-1764). San Diego, CA. September.
14. **Lu, S.**, Wickens, C., Sarter, N., Thomas, L., Nikolic, M., & Sebok, A. (2012). Redundancy gains in communication tasks: A comparison of auditory, visual, and redundant auditory-visual information presentation on NextGen flight decks. *Proceedings of the 56th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1476-1480). Boston, MA. October.
15. **Lu, S.**, Wickens, C., Sarter, N., & Sebok, A. (2011). Informing the design of multimodal displays: A meta-analysis of empirical studies comparing auditory and tactile interruptions. In *Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1170-1174). Las Vegas, NV. September.
16. Li, H., **Lu, S.**, Schumacher, R., & Seagull, F. (2011). Why multidisciplinary rounds are not multidisciplinary: Examination of a neonatal ICU rounding process. In *Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 758-762). Las Vegas, NV. September.

Non-Peer Reviewed Conference Proceedings

1. Herrmann, J., **Lu, S.**, & Schalliol, K. (2009). Delivery volume improvement for planning medication distribution. In *Proceedings of the 2009 IEEE International Conference on Systems, Man, and Cybernetics* (pp. 3605-3609). San Antonio, TX. October.
2. Herrmann, J., **Lu, S.**, & Schalliol, K. (2009). A routing and scheduling approach for planning medication distribution. In *Proceedings of the 2009 Industrial Engineering Research Conference* (1298-1303). Miami, FL. June.

Presentations and Invited Lectures

1. Byham, J. & **Riggs, S.** (2018). Quantifying Eye Movement: Changes in Entropy Over Time as a Function of Gradual and Sudden Workload Shifts. Poster presented at the *Clemson University Summer Undergraduate Research Symposium*. Clemson, SC.
2. **Riggs, S.** (2018). Touch in the real world: Overcoming limitations in tactile information processing. Invited lecturer. Multimodal Interaction in Augmented and Virtual Reality Summer School, Weimar, Germany.

3. **Riggs, S.** (2018). The effect of workload transitions on task performance and attention allocation. Invited seminar speaker. Max Planck Institute for Biological Cybernetics, Tübingen, Germany.
4. **Riggs, S.** (2018). The effect of workload transitions on task performance and attention allocation. Invited lecturer. Ludwig Maximilian University of Munich, Munich, Germany.
5. Gomes, K. & **Riggs, S.** (2018). The Evaluation of Tactile Technology for Continuous Informing Displays in Anesthesia. Presented at *2018 International Symposium on Human Factors and Ergonomics in Health Care*. Baltimore, MD. March.
6. **Riggs, S.** (2017). Towards the development of adaptive multimodal displays. Invited departmental seminar speaker. University of Wisconsin, Madison, WI.
7. **Riggs, S.** (2017). Briggs Dissertation Award. Invited address at the *APA Annual Convention*. Washington, D.C.
8. Jundi, H. & **Riggs, S.** (2017). Entropy-Based Statistical Analysis of Visual Attention. Poster presented at the *Clemson University Summer Undergraduate Research Symposium*. Clemson, SC.
9. Bidwick, L., Gomes, K., & **Riggs, S.** (2016). Crossmodal matching using the method of bracketing and adjustment. Poster presented at the *Clemson University Summer Undergraduate Research Symposium*. Clemson, SC.
10. Hutula, K. & **Riggs, S.** (2015). Using visualization to effectively capture multimodal data over time. Poster presented at the College of Charleston CCS REU Mini Conference. Charleston, SC. July.
11. Gomes, K. & **Riggs, S.** (2015). Crossmodal links between vision and audition: How visual attention changes over time. Presented at *The Industrial Engineering Research Conference (ISERC)*. Nashville, TN. May.
12. Vaigneur, H. & **Riggs, S.** (2015). A model of groupthink antecedents to quantitatively support hospital safety culture. Poster presented at the *2015 International Symposium on Human Factors and Ergonomics in Health Care*. Baltimore, MD. April.
13. Pitts, B., **Lu, S.**, & Sarter, N. (2013). Cross-modal matching: Towards the development of a novel technique. Poster presented at the *Michigan Engineering Graduate Symposium*. Ann Arbor, MI. November.
14. **Lu, S.**, Wickens, C., Sarter, N., Thomas, L., Nikolic, M., & Sebok, A. (2013). Supporting conflict avoidance in NextGen operations through tactile and auditory information presentation. 17th International Symposium on Aviation Psychology. Wright State University, Dayton, OH. May.
15. **Lu, S.**, Nemshak, M., Schumacher, R., & Seagull, F.J. (2013). Single-day quality measures within the neonatal ICU. Presented at the *2013 International Symposium on Human Factors and Ergonomics in Health Care (Next-Generation Scholars: Student Forum)*. Baltimore, MD. March.
16. **Lu, S.** (2013). Presenting at conferences: Single-day quality measures within the neonatal ICU. IOE 802: Oral Academic Presentation Doctoral Seminar (invited guest lecture). Ann Arbor, MI. March.
17. **Lu, S.**, Wickens, C., Sarter, N., Thomas, L., Nikolic, M., & Sebok, A. (2012). Comparing auditory, visual, and redundant auditory-visual: Information presentation on NextGen flight decks. Poster presented at the *16th Annual Michigan Space Grant Consortium (MSGC) Conference*. Ann Arbor, MI. October.
18. **Lu, S.** and Moacdieh, N. (2012). The Cali crash catastrophe in Columbia. IOE 434: Human Error and Complex System Failures. Ann Arbor, MI. January.
19. **Lu, S.** (2012). Overview of graduate school, cognitive ergonomics, and how to get involved with research projects. Undergraduate Research Opportunity Program (UROP) Seminar. Ann Arbor, MI. January.
20. **Lu, S.** (2009). The medical distribution problem. Presented at the IIE Annual Conference and Expo International Undergraduate Technical Paper Competition, Miami, FL. May.

21. **Lu, S.**, Malla, P., Purdue, A., & Veit, T. (2009). Universal design of a workstation. Presented at the Center of Engineering Logistics and Distribution (CELDi) Conference, Charlotte, NC. April 7-8. **Research Spotlight*
22. **Lu, S.** and Malla, P. (2009). Universal design of a workstation. Presented at the Atlantic Coast Conference (ACC) Meeting of the Minds Conference, Raleigh, NC. April. **Selected at the University level and by the College of Engineering.*
23. **Lu, S.** (2009). The medical distribution problem. *Presented at the IIE Regional Conference, Clemson, SC. February. *Winner of IIE Regional Undergraduate Technical Paper Competition*
24. **Lu, S.**, Wyatt, S., & Radnoti, K. (2006). Sunspot equilibriums in decision making. *Presented at the 4th Annual Virginia Polytechnic Institute and State University Undergraduate Research Conference, Blacksburg, VA. April.*

Technical Reports

1. Sarter, N., **Lu, S.**, Prinnet, J., Wickens, C., Sebok, A., Hutchins, S., Koenecke, Nikolic, M., & Thomas, L. (2012). "Context-Sensitive Information Presentation in Support of NextGen Operations." Report prepared for NASA-Langley Research Center under Grant #NNX09AQ34A (Technical Monitor: Dr. Kara Latorella).
2. Herrmann, J., **Lu, S.**, & Schalliol, K. (2008). "Routing and Scheduling for Medication Distribution Plans." Institute for Systems Research Technical Reports. September 18, 2008. <<http://hdl.handle.net/1903/8417>>.
3. **Lu, S.** "The Medical Distribution Problem." (2008). Institute for Systems Research Technical Reports. <<http://hdl.handle.net/1903/8381>>.

RESEARCH FUNDING

Agency	Title	Amount (Total)	Amount (Riggs)	Role	Year
NSF	CLB-CAREER Supplement	\$21,923	\$21,923	Sole-PI	2019 – 2020
NSF	CAREER: Collaboratively perceiving, comprehending, and projecting into the future: Supporting team situational awareness with adaptive multimodal displays	\$550,000	\$550,000	Sole-PI	2018 – 2023
NSF	REU Supplement	\$16,000	\$16,000	Sole-PI	2017 – 2018
NSF	CRII: Collaboratively perceiving, comprehending, and projecting into the future: Supporting team situational awareness with adaptive collaborative tactons	\$174,807	\$174,807	Sole-PI	2016 – 2018
AFOSR	A grid computing laboratory for integrative behavioral and optimization research	\$189,855	\$47,463	Co-PI	2016 – 2018
AHRQ	P30: Realizing improved patient care through human-centered design in the OR	\$4,000,000	\$391,235	Co-PI	2016 – 2019
Univ. of Virginia Launchpad	Design and testing of a closed-loop system for control of type 1 diabetes in young children 5-8 years old	\$50,735	\$10,000	Consultant	2015 – 2016
TOTAL		\$5,003,320	\$1,211,428		

HONORS

NSF CAREER Award	2018
College of Engineering, Computing and Applied Sciences Dean’s Faculty Fellows Award	2018
George E. Briggs Dissertation Award – American Psychological Association (APA)	2016
Human Factors Institute Research Support Initiative: Director’s Award	2015
NIH mHealth Summer Training Institute (mHTI) Scholar	2015
NSF CISE CAREER Proposal Workshop Travel Grant	2015
Michigan Space Grant Consortium Graduate Fellowship	2012, 2013
Rackham Graduate Student Research Grant	2013

HFES Council of Technical Groups Student Travel Honorarium	2013
Marian Sarah Parker Travel Grant	2013
Rackham Travel Grant	2011, 2012, 2013
Rackham Centennial Spring/Summer Fellowship (100 awarded throughout University)	2012
Harold and Vivian Shapiro/John Malik/Jean Forrest Award	2010
Industrial and Operations Engineering Departmental Fellowship	2009
1 st Place IIE Regional Technical Paper Competition	2009

TEACHING EXPERIENCE

Assistant Professor, *Clemson University*

- IE 2100/2101: Design and Analysis of Work Systems (Spring 2016 – 2018; undergraduate course and lab)
- IE 4510/6910: Investigating Human Error in Complex Systems (Fall 2014, 2016, 2018; Spring 2016; graduate/upper-level undergraduate course)
- IE 8150: Research Methods in Ergonomics (Spring 2015, 2018; graduate course)
- IE 8930: Multimodal Displays (Fall 2017; graduate course)

Graduate Student Instructor, *University of Michigan*

Winter 2013

- IOE 334: Ergonomics Lab (undergraduate lab; average rating: 4.5/5)
 - Primary instructor for four lab sections and GSI for another four section (~160 student total), held office hours, edited and created labs, answered student questions via e-mail, looked over all lab report grades
- IOE 265: Probability and Statistics for Engineers (undergraduate course)
 - Led weekly lab sections (overseeing 60+ students), recorded lectures for lab assignments, created homeworks, held office hours, answered student questions via e-mail, graded midterms and final exams

Teaching Assistant, *University of Michigan*

Winter 2012

- IOE 434: Human Error and Complex System Failures (graduate/upper-level undergraduate course)

Grader, *University of Michigan*

Fall 2011, Fall 2013

- IOE 536: Cognitive Ergonomics
- IOE 539: Safety Engineering and Methods

Grader, *Virginia Polytechnic Institute and State University*

Spring 2008 – Spring 2009

- ENGE 1024: Engineering Exploration
- ENGE 1114: Exploration of Engineering Design

Training Programs

- ASEE National Effective Teaching Institute Workshop July 2015
- Preparing Future Faculty Seminar, *University of Michigan* May – June 2013
 - Selective and intensive five week seminar series covering topics related to faculty work and lifestyle, instructional methods and technologies, research on teaching and learning, diversity issues in the academic setting, and development of a teaching statement and course syllabus
- University of Michigan Graduate Teaching Certificate 2013
 - <http://sitemaker.umich.edu/um.gtc/description>
- Rackham-CRLT Preparing Future Faculty Conference, *University of Michigan* October 2012
 - Sessions provided materials and information about pursuing an academic career

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Conference Organization and Committee Work

Human Factors and Ergonomics Society (HFES)

- Committee member, HFES WOMAN Group 2017 – Present
- Committee member, HFES Webinar Series 2017 – Present
- Alphonse Chapanis Best Student Paper Selection Committee 2017, 2018
- Panelist, Student Career and Professional Development (Academic Jobs and Interviews) 2015
- Chair, Displays to Support Cognition 2015
- Chair, Situation Awareness and Observer Judgment 2015
- Co-chair, Aids and Alerting 2015
- Chair, Displays and Imaging Session 2014
- Co-chair, Human Robot Interaction Session 2013

Professional Memberships

- Human Factors and Ergonomics Society (HFES) 2010 – Present
- Institute of Industrial and Systems Engineers (IISE) 2008 – 2009, 2014 – Present
- American Society for Engineering Education (ASEE) 2014 – Present
- American Psychological Association (APA, Division 21) 2011 – Present
- Society of Automotive Engineers (SAE) 2010 – 2011

Editorial and Reviewer Experience

Grant Proposals

- NSF Proposal Review Panelist 2015, 2016
- NIH Early Career Reviewer 2015 – Present

Journals

- Editorial Board 2017 – Present
 - *Human Factors and Ergonomics in Manufacturing & Service Industries*
- Reviewer, *Frontiers in Psychology* 2018 – Present
- Reviewer, *Journal of Manufacturing Systems* 2016 – Present
- Reviewer, *International Journal of Human Computer Studies* 2016 – Present
- Reviewer, *Journal of Cognitive Engineering and Decision Making* 2016 – Present
- Reviewer, *International Journal of Industrial Ergonomics* 2015 – Present
- Reviewer, *Human Factors* 2014 – Present
- Reviewer, *Ergonomics* 2012 – Present

Conferences

- Reviewer, American Society of Mechanical Engineering (ASME IDETC/CIE) 2016 – Present
- Reviewer, Industrial and Systems Engineering Research Conference 2015 – Present
- Reviewer, IEEE International Conference on Systems, Man, and Cybernetics 2012 – Present
- Reviewer, Annual Meeting of the HFES (CEDM, Healthcare, P&P) 2011 – Present

Clemson University, Industrial Engineering Department

- Member, search committee for faculty position 2016 – 2017, 2018 – 2019
- Member, search committee for lecturer position 2015
- Member, graduate committee 2014 – Present

STUDENT ADVISING AND MENTORSHIP

Clemson University

Ph.D. Thesis Chair

- Kylie Gomes, Industrial Engineering 2015 – Present
 - NSF GRFP awardee
 - IISE Gilbreth Memorial Fellowship
 - Creative Inquiry student
- Shannon Devlin 2015 – Present
 - Jim Chisman Outstanding Senior Award (Most Outstanding Senior in IE); Outstanding Project Manager for Senior Design (IE 4670)
 - Honors thesis student
- Logan Clark 2018 – Present

Master's Thesis Chair

- Scott Betza, M.S. Industrial Engineering 2017
 - Thesis title: "Investigating tactile displays to support anesthesia providers in the operating room"
 - *Current position: Lead Systems Engineer at SPAWAR*

Undergraduate Honors Thesis Chair

- Jenny Byham, B.S. Industrial Engineering 2017 – Present
- Jake Flynn, B.S. Industrial Engineering 2017 – Present
 - Hambright Leadership Program Award; Junior Academic Achievement Award (Junior with highest GPA in IE)
- Haley Meier, B.S., Industrial Engineering 2017 – Present
- Aakash Bhagat, B.S. Computer Science 2016 – 2018
 - Thesis title: "Predicting movement time and movements in 3D: Fitts' Law revisited in virtual reality"
 - *Current position: Programmer at Home Depot*
- Shannon Kay, B.S. Industrial Engineering 2015 – 2016
 - Accepted into Harvard Business School (2+2 Program); Senior Academic Achievement Award; Lindenmeyer Leadership and Public Service Award; Clemson student body president
 - Thesis title: "Using daily smartphone notifications to motivate college-aged students to exercise"
 - *Current position: Senior Analyst at Wayfair*

Creative Inquiry Advisor

- Sydney Granger 2018 – Present
- William Humphrey 2018 – Present
- Erin Murphey 2018 – Present
- Ebony Johnson, B.S. Industrial Engineering 2017 – 2018
 - *Current position: Ph.D. student at the University of Florida*

UPIC Internship Mentor

- Ethan Cook 2018 – Present
- Nicholas Duenas 2018 – Present
- Nicolas Threatt 2018 – Present
- Shane Ragusa, B.S. Computer Science 2017 – 2018
- Julian Dixon, B.S. Computer Science 2016
 - *Current position: System engineer at McCraw Group*
- Megan Fowler, B.S. Computer Science 2016 – 2017
 - *Current position: Master's student at Clemson College of Education*
- James Hatfield, B.S. Computer Science 2015
 - *Current position: Systems programmer for Clemson School of Computing*
- Alexzander Lee, B.S. Computer Science 2017 – 2018
 - *Current position: Ph.D. student at Clemson School of Computing*
- Ashutosh Singhal, B.S. Computer Science 2015
 - *Current position: Senior customer success manager at Appthority*
- Alexei Yankovsky, B.S. Computer Science 2016 – 2017
 - *Current position: Programmer at Robins Air Force Base*

American University of Beirut Internship Mentor

- Jawad Alami, B.S. Computer Engineering Summer 2018
- Hussein Jundi, B.S. Industrial Engineering and Computer Engineering Summer 2017

Thesis Committee Member

- Sijun Shen, Ph.D. 2016
- Elizabeth Jamison, M.S. 2016
- Puneeth Kalavagunta, M.S. 2015

University of Michigan

- Christie Rockwell, B.S.E. Industrial and Operations Engineering 2012 – 2014
 - Marian Sarah Parker Scholar Program
 - *Current position: Engineer at Lockheed Martin (OLDP)*
- Heejin Jeong, Ph.D. Industrial and Operations Engineering 2013 – 2014
 - *Current position: Research Fellow at UMTRI*
- Kathy Lu, M.S.E. Industrial and Operations Engineering 2012
 - *Current position: Software Engineer at Butterfly Network*

Virginia Tech

- Kathleen Hudgins, B.S. Systems and Information Engineering 2009
 - Primary mentor for the Human Computer Interaction NSF Research Experiences for Undergraduates Program (REU)
 - *Current position: Lead Analyst at Technomics*

CONSULTING EXPERIENCE

- Engineering Teaching Consultant (ETC)** 2013 – 2014
- Part of selected group of experienced Graduate Student Instructors (GSIs) who serve as consultants and teaching mentors to the rest of the College of Engineering's GSI population. Trained on best teaching practices, peer mentoring, and teaching observation/evaluation.
- Integrative Systems + Design Continuing Education Courses** 2012 – 2014
- Helping with hands-on simulations, group exercise, and teaching concepts for lean healthcare, lean manufacturing, and lean office simulations.

EXTRACURRICULAR ACTIVITIES

- NSF Grants Conference, *Attendee* 2015
- NSF CAREER Proposal Writing Workshop (CISE), *Attendee* 2015
- University of Michigan HFES Student Chapter, *President, President-Elect, Member* 2009 – 2014
- THInC Laboratory, *Lab Manager, Webmaster* 2009 – 2014
- Marian Sarah Parker Scholar Program Panel, *Panelist* 2014
- Engineering GSI and IA Teaching Orientation, *Practice Teaching Facilitator* 2013 – 2014
- Developing an Engineering Teaching Philosophy for College of Engineering, *Co-Facilitator* 2013
- Write Winning NIH Grant Proposals Workshop by Dr. David Morrison, *Attendee* 2013
- Experienced Instructor Panel for Engineering Instructional Aid Orientation, *Invited Panelist* 2013
- Southeast Michigan Science Fair, *Judge* 2012, 2013
- Girls on the Run, *Coach* 2010 – 2011
- After school program for pre-teen girls combining training for a 5K run with self-esteem enhancing lessons
- College of Engineering Recruit at Home, *University of Michigan Liaison* 2010
- Coordinated graduate school and information sessions with the National Society for Black Engineers (NSBE) and Alpha Pi Mu (APM) at Virginia Tech
- University of Michigan Alpha Pi Mu, *Graduate Student Advisor, Relay for Life Co-Chair* 2009 – 2010
- Outstanding Chapter Award (3rd Place), 2009-2010 *Voted on by International Alpha Pi Mu executive council
- Virginia Polytechnic Institute and State University Alpha Pi Mu, *President, Social Chair* 2006 – 2009
- Outstanding Chapter Award (1st Place), 2007-2008, 2008-2009 *Voted on by International Alpha Pi Mu executive council

OTHER WORK EXPERIENCE

Proposal Assistant

January 2009 – May 2009

Virginia Polytechnic Institute and State University, Blacksburg, VA

Advisor: Dr. Brian Kleiner

- Help complete various tasks associated with the \$25 million NIOSH resubmission proposal. Main tasks include developing a cost spreadsheet and conducting literature reviews for various projects.

NSF Research Experiences for Undergraduates (REU) Participant

June 2008 – August 2008

University of Maryland, College Park, MD

Advisor: Dr. Jeffrey Herrmann

- Developing a robust plan for local governments in case of a bioterrorism attack. Specifically producing schedules so trucks making multiple deliveries deliver enough medication taking into consideration that sites have different demands, sites are part of different routes of varying lengths, and all sites have enough medication at all times.

Intern

May 2007 – August 2007

General Electric, Greenville, SC

- Working with Wind Energy. Various roles included: materials resource planner (MRP) replacement (keeping track of inventory, following daily progress of each unit, issuing parts); designing, programming, and inputting information gathered from shop floor workers for a database of defects found during testing; help streamline turbine production by finding alternative ways to move components across the shop floor which included directly contacting and meeting with suppliers of air bearing casters; designing a tool to be used with a new drill to help reduce physical stress upon the hands and wrists of the shop floor workers.