Ben D. Sawyer, PhD, MSIE

a: 1 Main St., MIT E90-63c, Cambridge, MA 02142
e: bsawyer@mit.edu
p: +1 617 420 2237

A strong researcher and communicator, I seek out opportunities to understand and mitigate difficult human-machine problems. I have spoken on Engineering Psychology at Harvard, MIT, XingHua, and Purdue University, Air Force Research Laboratory, and The White House. My record of success with the entire arc of scientific research, engineering design, and project management is recorded in journal articles and coverage by Forbes, Fast Company, Scientific American, and The BBC.

Skillset

◇ Human Factors	◇ Industrial Engineering	◇ Attention Management	◇ Presentation & Speaking
◇ Ergonomics	◇ Multivariate Statistics	◇ Modeling & Simulation	◇ Teaching & Class Design
◇ Neuroergonomics	◇ Experimental Design	◇ Interaction Design	◇ Project Management

Training

Postdoctoral Studies: AgeLab @ MIT, Cambridge, MA *2016-17*
PhD, Applied Experimental & Human Factors Psychology @ UCF, Orlando, FL *2010-15*
MS, Industrial Engineering: *Human Systems Engineering* @ UCF, Orlando, FL *2010-14*
BS, Cognitive Psychology: Honors Scholar @ CSU, Fort Collins, CO *2007-10*

Selected Research Roles

Massachusetts Institute of Technology (MIT), AgeLab, Postdoctoral Associate 2016-17

Presently leading experimentation & design toolset development within the "Advanced Human Factors Evaluator for Automotive Demand" (AHEAD) and "Clear Information Presentation" (ClearIP) consortiums.

- Collaboration with automotive industry leaders including Honda, Google, Jaguar-Landrover, & Mazda
- Generation & validation of attentional theory & algorithmic tools through statistical modeling and simulation
- Writing for support and managing funding relationships with industry, federal, and DOD research partners

University of Central Florida (UCF), Industrial Engineering Dept., Research Engineer *2014-15*

Secured funding for an electroencephalography (EEG) facility. Produced original neuroergonomic surface transport research investigating Error Related Negativity (ERN) in an applied motorcycle conspicuity task.

- Developed experimental design & analysis algorithms for programmatic research of neural error signals
- Wrote for internal and external funding, and published journal articles and partner technical publications

Air Force Research Laboratory (AFRL), Wright Patterson AFB, Repperger Research Fellow *2013-15*

Twice won research fellowships, and between worked as a contractor in AFRL's 711th Human Performance Wing, first with Applied Neuroscience (RHCP), then with Battlefield Acoustics' BATMAN unit (RHCB).

- Researched vigilant attention, designing the Email Testbed (ET) to investigate daily email operations (RHCP)
- Adapted a waterfall IP address display for research into cyberdefender center operations optimization (RHCP)
- Experimentally evaluated prototype augmented reality (AR) interfaces toward design for special ops (RHCB)
- Designed and led construction of a motion capture Battlefield Distraction Simulator at the USAFA (RHCB)
- Led a first-ever evaluation of Google Glass use in driving, and authored an award-winning publication (RHCB)

Institute for Simulation & Training (IST), MIT² Laboratory, Laboratory Manager *2011-15*

Managed and mentored research assistants, led research projects, and adapted laboratory facilities. In parallel with PhD work and in direct collaboration with our Director Peter Hancock, secured over $200k in funding.

- Led a team of 20+ to update and re-design a networked driving simulation cluster, and subsequent research
- Designed a three-seat networked driving sim cluster, custom data fusion, and 'serendipitous' event scripting
- Managed *Robotics Collaborative Technology Alliance*: 2012, *Factors Influencing Visual Search*: 2012-2014

Selected Awards

MIT Media Lab- MAKE ME++ Hackathon *2016*
UCF College of Sciences- Best Dissertation Award *2016*
IEA International Ergonomics Association- KU Smith Best Triannual Student Journal Paper *2015*
ICCAE Intelligence Community for Academic Excellence Scholarship *2015*
NHTSA National Highway Traffic Safety Administration- Enhanced Safety of Vehicles Design *2011*

Selected Invited Lectures

Google: Android Auto Group. *Human Factors in Driving Demand Estimation.* (2017) Sunnydale, CA.
Massachusetts Institute of Technology: Computer Science and Artificial Intelligence Laboratory (CSAIL). *Prevalence Effects in Driving Attention: Human Factors Implications for Autonomy.* (2017) Cambridge, MA.
Human Factors and Ergonomics Society Annual Meeting: Chair: featured session. *How Human Factors Must Change to Address Cybersecurity.* (2016) Washington D.C.
Jaguar-Landrover: Automotive Research & Development. *Demand in The Automobile.* (2016) Warwick, UK
Harvard University: Schepens Eye Institute. *Google Glass: From distraction to mitigation.* (2015). Boston, MA
Purdue University: School of Industrial Engineering. *Human-technology interference* (2015). Lafayette, IN
Tsinghua University: Industrial Engineering Department. *Epoch analysis of driving: Using strategies from EEG ERP brain activity research in simulation.* (2015). Beijing, China
White House. *Office of Science & Technology Policy & U.S. Dept. of Transportation Safety Datapalooza*. (2012). Washington D.C.
NHTSA Emergency Safety Vehicle Conference. *ESV Design Contest Finalist Presentation: Safety through individuation by rapid face recognition with DriveID.* (2011). Washington D.C.

Instruction	*Fellow.* **Kaufman Teaching Certificate Program,** Massachusetts Institute of Technology	2017
	Guest Lecturer. **PSY6257 Human Factors II,** University of Central Florida	2015
	Instructor **EXP3604c Cognitive Psychology,** University of Central Florida	2014
	Teaching Asst. **PSY7217 Advanced Research Methods I,** University of Central Florida	2013
	Teaching Asst. **PSY3842 Sleep Psychology,** University of Central Florida	2012
	Lab Instructor. **PSY210 Research Methods,** University of Central Florida	2010
	Teaching Asst. **PSY453 Cognitive Psychology,** Colorado State University	2009

Mentoring

Geitner, C. (2015). *A Link between trust in technology and glance allocation in on-road driving.* PhD Thesis Chapter, MIT AgeLab, MA.

Nir, T. (2015). Hebrew and computer-mediated communication: The effects of a language manipulation on perception, identity, and preservation. Honors Thesis, University of Central Florida Orlando, FL.

(One in progress)

Walker, J. (2015). An examination of individual differences in the context of performance on a feedback v. no feedback vigilance task. Honors Thesis, University of Central Florida Orlando, FL.

MacArthur, K.R. (2014). Deindividuation of drivers: Is everyone else a bad driver? Honors Thesis, University of Central Florida Orlando, FL.

Siler, J. (2013). Generation and the Google effect: Transactive memory system preference across age. Honors Thesis, University of Central Florida Orlando, FL.

Niederman, E. (2013). Investigation of visual requirements for change detection. Honors Thesis, University of Central Florida Orlando, FL.

Selected Funding

External

- Project Manager, **Clear Information Presentation (ClearIP).** Monotype, Google, Mazda, *$215,000, June 1, 2017 to June 1, 2018*
- Co-PI, **Workload and Scheduling Tools for Long Duration Missions.** NASA Johnson Space Center, Contract Number: 64016363, *$22,615*, April 6th 2015 to February 29th 2016.
- Grant writer, **Factors Influencing Search in Complex Driving Environments.** Component Element of the Georgia Institute of Technology/NHTSA UTC Project, Contract Number: RC614 G3, *$45,000*, January 1st, 2012 to January 31st, 2014.

Internal

- Senate Bill Author, **HFES SGA Travel Grant**, UCF, *$57,000* to date (renews annually), 2011-Present
- P.I., **IEMS Equipment Grant (EEG System)**, UCF, *$19,000*, 2014
- P.I., **Eye-tracking Upgrade**, UCF, *$60,000*, 2011
- P.I., **Simulator Upgrade Grant**, UCF, *$6,450*, 2011
- P.I., **Simulator Software Development Grant**, UCF, *$12,640*, 2011

Service

- Reviewer: *Ergonomics*, (2017-Present)
- Reviewer: *Applied Ergonomics*, (2016-Present)
- Reviewer: *Human Factors*, (2013-Present)
- Reviewer: HFES Annual Conference, (2012-Present)
- HFES Student Chapter Social Chair (2011), Treasurer (2012), President (2013)
- Session Chair: American Psychological Association 2012 Meeting
- Session Co-Chair: Human Factors & Ergonomics Society 2012-2015 Meeting
- Student Session Chair: Human Factors & Applied Psychology 2011 Meeting

Selected Consulting

Automotive Startup, *Human Factors Consultant*
Lifesafer, Inc., *Driving Simulation Human Factors Consultant*
Coben & Associates, *Crash Scene Investigator*
UXscience, *Driving Human Factors Consultant*
Popup Project, University of Central Florida, *Online Education Support*
Siemens Wind Energy, *Human Factors Consultant*
IBM Academic, *Web HCI Consultant*

Journal Publications (14)

1. Lee, J.B., **Sawyer, B.D.**, Mehler, B., Angell, L., Seppelt, B., Seaman, S., Fridman, L., Reimer, B. (in press). Linking the Detection Response Task and the AttenD Algorithm thourgh the Assessment of Human Machine Interface Workload. *Transportation Research Record*.
2. Jansen, R.J., **Sawyer B.D.**, van Egmond, R., de Ridder, H. & P.A. Hancock (2016) Hysteresis in mental workload and task performance: The influence of demand transitions and task prioritization. *Human Factors*, *58*(8), 1143-1157.
3. **Sawyer, B. D.**, Finomore, V. S., Funke, G., Warm, J. S., Matthews, G, Hancock, P. A. (*2016*). Cyber vigilance: the human factor. *American Intelligence Journal,* 32(2), 157-165.
4. **Sawyer, B. D**., Karwowski, W., Xanthopoulos, P., & Hancock, P. A. (2016). Detection of error-related negativity in complex visual stimuli: a new neuroergonomic arrow in the practitioner's quiver. *Ergonomics*, 1-7.
5. Hancock, P. A., & **Sawyer B.D.** (2015) Judging thieves of attention: Commentary on "Assessing cognitive distraction in the automobile," by Strayer, Turrill, Cooper, Coleman, Medeiros-Ward, and Biondi (2015)." *Human Factors* 57(8) 1339-1342.

6. Hancock, P. A., Hancock, G., **Sawyer, B. D.** (2015). Cybernomics and the implications of cyber-deception. *The Ergonomist*, *537*, 12-14.
7. Hancock, P. A., **Sawyer, B. D.**, & Stafford, S. (2015). The effects of display size on performance. *Ergonomics*, *58*(3), 337-354.
8. **Sawyer, B. D.**, Finomore, V. S., Calvo, A. A., & Hancock, P. A. (2014). Google glass: A driver distraction cause or cure? *Human Factors*, *56*(7), 1307-1321.
9. Blalock, L. D., **Sawyer, B. D.**, Kiken, A., Gutzwiller, R. S., McGrill, C. L., & Clegg, B. A. (2014). Cognitive load while driving impairs memory of moving but not stationary elements within the environment. *Journal of Applied Research in Memory and Cognition, 3*(2), 95-100.
10. **Sawyer, B. D.**, & Hancock, P. A. (2012). Assisted entry mitigates text messaging based driving detriment. *Work*, *41*(2012), 4279–4282.
11. Cleary, A. M., Brown, A. S., **Sawyer, B. D.**, Nomi, J. S., Ajoku, A. C., & Ryals, A. J. (2012). Familiarity from the configuration of objects in 3-dimensional space and its relation to déjà vu: A virtual reality investigation. *Consciousness and Cognition, 21*(2), 969–975.
12. **Sawyer, B. D.**, Hancock, P. A., Deaton, J., & Suedfeld, P. (2012). Finding the team for Mars: a psychological and human factors analysis of a Mars Desert Research Station crew. *Work, 41*(2012), 5481–5484.
13. **Sawyer, B.**, Teo, G., & Mouloua, M. (2012). DriveID: safety innovation through individuation. *Work*, *41*(2012), 4273–4278.
14. Ledbetter, J. L., Boyce, M. W., Fekety, D. K., **Sawyer, B.**, & Smither, J. A. (2012). Examining the impact of age and multitasking on motorcycle conspicuity. *Work, 41,* 5384-5385.

Journal Publications in Review (3)

1. **Sawyer, B. D.** (*In review*). Hacking the human factor: Prevalence effects in phishing and whaling cyberattack.
2. **Sawyer, B. D.**, Karwowski, W., Xanthopoulis, P., Hancock, P. A. (*In review*). The power of one: Single electrode electroencephalography efficacy in aggregate applied data.
3. **Sawyer, B. D**., Oppold, P., & Hancock, P. A. (*In review*). The Population Specific User Mastery Scale: PSUM links designers and trainers to user goals.

Proceedings Publications (18)

1. **Sawyer, B. D.,** Dobres, J., Mehler, B., & Reimer, B. (in press). The Cost of Cool: Typographic Style Legibility in Reading at a Glance. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Austin TX.
2. **Sawyer, B. D.,** Mehler, B., & Reimer, B. (in press). Trusting Eyes: Voice Navigation System-directed Glance Strategy in High and Low Trust Drivers. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Austin TX.
3. **Sawyer, B.D.**, Mehler, B. & Reimer, B. (2017). An antiphony framework for dividing tasks into subtasks. *Proceedings of the Ninth International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design*.
4. Claudia, G., **Sawyer, B.D.**, Birrell, S., Jennings, P., Skrypchuk, L.,Mehler, B. & Reimer, B. (2017). A link between trust in technology and glance allocation in on-road driving. *Proceedings of the Ninth International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design*.
5. **Sawyer, B. D**., Karwowski, W., Xanthopoulos, P., & Hancock, P. A. (2016). Applied Potential: Neuroergonomic Error Detection in Single Electrode Electroencephalography. *Presentation at Neuroergonomics,* Paris, France.
6. Mehler, B., **Sawyer, B. D**. & Reimer, B. (2016). An Applied Driving Evaluation of Electrodermal Potential as a Measurement of Attentional State. *Presentation at Neuroergonomics,* Paris, France.
7. **Sawyer, B. D.,** Lee, J., Dobres, J., Mehler, B., Coughlin, J. F., & Reimer, B. (2016). Effects of a voice interface on mirror check decrements in older and younger multitasking drivers. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 60*(1), 95-100. Washington DC.
8. Greenlee, E. T., Funke, G. J., Warm, J. S., **Sawyer, B. D**., Finomore, V. S., Mancuso, V. F. & Matthews, G. (2016). Stress and Workload Profiles of Network Analysis: Not All Tasks Are Created Equal. *Advances in Human Factors in Cybersecurity*, 153.
9. Gutzwiller, G.S., Fugate, S., **Sawyer, B. D.**, & Hancock, P. A. (2015). The Human Factors of Cyber Network Defense. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 59*(1), *322-326*.
10. **Sawyer, B. D.**, Finomore, V. S., Funke, G., Mancuso, V., Warm, J. S., & Hancock, P. A. (2015). Evaluating cybersecurity vulnerabilities with the email test-bed: Effects of training. *Proceedings of the 19th Triennial Congress of the International Ergonomics Association, 9*, 14*.* Melbourne, Australia.
11. **Sawyer, B. D.**, Calvo, A., Finomore, V.S., & Hancock, P. A. (2015). Serendipity in simulation: Building environmentally valid driving distraction evaluations of google glass and an android smartphone. *Proceedings of the 19th Triennial Congress of the International Ergonomics Association, 9*, 14*.* Melbourne, Australia.
12. Hancock, G., & **Sawyer, B. D.** (2015). A heuristic-based re-evaluation of the IBM Academic Initiative Project interface. *Proceedings of the 19th Triennial Congress of the International Ergonomics Association, 9*, 14*.* Melbourne, Australia.
13. **Sawyer, B. D.**, Finomore, V. S., Funke, G., & Warm, J. S. (2014). Cyber vigilance: effects of signal probability and event rate. *Proceedings of the 2014 Human Factors and Ergonomics Society Annual Meeting, 58*(1), 1771-1775. Chicago, IL.
14. **Sawyer, B. D.**, & Hancock, P. A. (2014). An evaluation of drivers using an ignition interlock breath test while driving. *Proceedings of the 2014 Human Factors and Ergonomics Society Annual Meeting, 58*(1), 2098-2101. Chicago, IL.
15. **Sawyer, B. D**., & Hancock, P. A. (2013). Performance degradation due to automation in texting while driving. *Proceedings of the 7th International Driving Symposium on Human Factors in Driving Assessment, Training and Vehicle Design, No.* 68, 446-452. Bolten, NY.

16. **Sawyer, B. D**., & Hancock, P. A. (2012). Development of a linked simulation network to evaluate intelligent transportation system vehicle to vehicle solutions. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 56*(1), 2316-2320.
17. Fok, A. W., Frischmann, T. B., **Sawyer, B.,** Robin, M., & Mouloua, M. (2011). The impact of GPS interface design on driving and distraction. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 55*(1), 1755–1759.
18. Blalock, L. D., **Sawyer, B. D.,** Kiken, A., & Clegg, B. A. (2009). The impact of load on dynamic versus static situational knowledge while driving. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 53*(18), 1338-1342.

Invited Lectures (13)

1. **Google**: Android Auto Group. *Human Factors in Driving Demand Estimation.* (2017) Sunnydale, CA.
2. **Massachusetts Institute of Technology**: Computer Science and Artificial Intelligence Laboratory (CSAIL). *Prevalence Effects in Driving Attention and Distraction: Implications for Autonomy.* (2017) Cambridge, MA.
3. **Jaguar-Landrover:** Automotive Research & Development. *Demand in The Automobile.* (2016) Warwick, UK
4. **Human Factors and Ergonomics Society Annual Meeting:** Chair: featured session. *How Human Factors Must Change to Address Cybersecurity.* (2016) Washington D.C.
5. **DENSO International America:** Technology Division. *Attention Management: Demand Mitigation through Design.* (2016) Detroit, MI
6. **Harvard University**: Schepens Eye Institute. *Google Glass: From distraction to mitigation.* (2015). Boston, MA
7. **Massachusetts Institute of Technology**: AgeLab. *Google Glass: A driver distraction cause that looks toward a cure.* (2015). Cambridge, MA
8. **Purdue University**: School of Industrial Engineering. *Human-Technology Interference* (2015). Lafayette, IN
9. **Tsinghua University**: Industrial Engineering Department*. Epoch analysis of driving with Google Glass: Using strategies from EEG ERP brain activity research in simulation.* (2015). Beijing, China
10. **University of Canterbury**: Psychology Department*. Meet E.T.: Cybersecurity research with the email testbed.* (2015). Christchurch, New Zealand
11. **Purdue University**: Krannert School of Management. *The human factors and neuroscience of entrepreneurship.* (2015). Lafayette, IN
12. **White House**. *Office of Science & Technology Policy & U.S. Dept. of Transportation Safety Datapalooza*. (2012). Washington D.C.
13. **NHTSA Emergency Safety Vehicle Conference**. *ESV Design Contest Finalist Presentation: DriveID.* (2011). Washington D.C.

Conference Presentations without Proceedings (41)

1. Walker, J.A., Hancock, G.M., **Sawyer, B.D**., Karwowski, W., Sims, V.K., Hancock, P.A. (2016). An Examination of Individual Differences in the Context of Vigilance. *Poster at University of Central Florida's Annual Showcase of Undergraduate Research,* Orlando, FL.
2. Sawyer, B.D. (Chair), Schuster, D., Hancock, P.A. (2016) How Human Factors Must Change to Address Cybersecurity. *Featured invited panel presented at The Human Factors & Ergonomics Society Annual Meeting*, Washington, D.C.
3. Vieane, A. (Chair), Hale, K. (Cochair), Sawyer, B.D., Funke, G., Mancuso, V., Wickens, C. (2016) Addressing Human Factors Gaps in Cyberdefense. *Panel presented at The Human Factors & Ergonomics Society Annual Meeting*, Washington, D.C.
4. Walker, J.A., Hancock, G.M., **Sawyer, B.D**., Karwowski, W., Sims, V.K., Hancock, P.A. (2016). An Examination of Individual Differences in the Context of Vigilance. *Poster at University of Central Florida's Annual Showcase of Undergraduate Research,* Orlando, FL.
5. Walker, J.A., **Sawyer, B.D.,** Hancock, G.M., Karwowski, W., Sims, V.K., Hancock, P.A. (2016). Individual Differences in Working Memory Capacity and the Role They Play in Performance on a Feedback v. No Feedback Vigilance Task. Poster at *Tampa University's Florida Undergraduate Research Conference,* Tampa, FL.
6. **Sawyer, B. D.**, Oppold, P., & Hancock, P. A. (2015). Using the Population Specific User Mastery (PSUM) Scale to determine training needs. *Presented at the 19th Triennial Congress of the International Ergonomics Association 2015.* Melbourne, Australia.
7. Nir, T., Shankle, J., Stafford, S., Hancock, P.A., & **Sawyer, B.D.** (2015). *Measuring Judgment, Reaction Time, and Reaction Type in Drivers.* Poster presented at the Human Factors and Applied Psychology Student Conference, Daytona Beach, FL and at the Summer Research Academy at the University of Central Florida, Orlando, FL.
8. Shankle, J., Nir, T., Stafford, S., Hancock, P.A., & **Sawyer, B. D.** (2015). *Measuring Judgment, Reaction Time, and Reaction Type in Drivers: Comparing Collision Rates of Four Scenarios.* Poster presented at University of Central Florida's annual Showcase of Undergraduate Research Excellence, Orlando, FL.
9. Walker, J.A., Xanthopoulos, P., Karwowski, W., Hancock, P.A., **Sawyer, B. D.** (2015). Interpreting Electroencephalography Output for Error-Related Negativity. *Presentation at the 8th annual Student Conference on Human Factors and Applied Psychology*, Daytona Beach, FL.
10. Walker, J.A., Xanthopoulos, P., Karwowski, W., Hancock, P.A., **Sawyer, B. D.** (2015). Qualitative Analysis of Event-Related Potential EEG Data. *Poster presented at the University of Central Florida's Annual Showcase of Undergraduate Research Excellence*, Orlando, FL.
11. Nir, T., Shankle, J., Vermillion, B**.** Hancock, P.A., & **Sawyer B.D.** (2015, April). *Driver Distraction Simulation Testbed (Building).* Poster presented at University of Central Florida's annual Showcase of Undergraduate Research Excellence, Orlando, FL.
12. Nir, T., Shankle, J., Stafford, S., Hancock, P.A., & **Sawyer, B.D.** (2015, March). *Driver Reaction: Collision Rates in Four Maps.* Poster presented at the 2nd annual Undergraduate Psychology Conference, Orlando, FL.

13. **Sawyer, B. D.**, Finomore, V. S., Funke, G., Warm, J. S., & Hancock, P. A. (2014). Vigilance in cyber defense: a strategy and individual differences based approach*. Presented at the American Psychological Association 2014 annual convention*. Washington D.C.
14. MacArthur, K. R., Greenstein, S., **Sawyer, B. D.**, & Hancock, P. A. (2014). PSUM: Training in Google Glass and Android. *Presented at the American Psychological Association 2014 Annual Convention*. Washington D.C.
15. **Sawyer, B. D.**, Calvo, A., Finomore, V.S., & Hancock, P. A. (2014). Evaluating Google Glass by building serendipity in simulation. *Presented at the Human Factors & Applied Psychology Student Conference at Embry-Riddle Aeronautical University*. Daytona Beach, FL.
16. **Sawyer, B. D.**, Finomore, V. S., Funke, G., & Hancock, P. A. (2014). Are cyber tasks examples of vigilant attention? *Presented at the Human Factors & Applied Psychology Student Conference at Embry-Riddle Aeronautical University*. Daytona Beach, FL.
17. Siler, J., **Sawyer, B. D.**, Stafford, S., & Hancock, P. A. (2014). Driving simulation: Ecological validation and participant perception. *Presented at the Human Factors & Applied Psychology Student Conference at Embry-Riddle Aeronautical University*. Daytona Beach, FL.
18. MacArthur, K. R., Greenstein, S., **Sawyer, B. D.**, & Hancock, P. A. (2014). Mastering Google Glass. *Presented at the Human Factors & Applied Psychology Student Conference at Embry-Riddle Aeronautical University*. Daytona Beach, FL.
19. Walker, J. A. Diaz, D. A., Finomore, V., Funke, G., **Sawyer, B. D.**, Hancock, P. A. (2014). Can you think through the boredom? An examination of executive functioning in cybernetic vigilance tasks. *Presented at the Human Factors & Applied Psychology Student Conference at Embry-Riddle Aeronautical University*. Daytona Beach, FL.
20. Walker, J., McPeak, B., Perkins, S., Fishburn, D., Tungate, A., Stafford, S., **Sawyer, B. D**., & Hancock, P. A. (2014). Event labeling in the context of weapon discrimination. *Presented at the 60th annual meeting of the Southeastern Psychological Association.* Nashville, TN.
21. Siler, J., Niederman, E., **Sawyer, B. D**., & Hancock, P. A. (2014). Braking the chain: A brake light impact prevention system. P*resented at the 60th meeting of the Southeastern Psychological Association*. Nashville, TN.
22. Niederman, E., Siler, J., Diaz, D. A., **Sawyer, B. D.**, & Hancock, P. A., (2014). Texting with your own phone does not improve driving performance. *Presented at the 60th annual meeting of the Southeastern Psychological Association*. Nashville, TN.
23. Diaz, D. A., Walker, J. A., Finomore, V., Funke, G., **Sawyer, B. D.**, & Hancock, P. A., (2014). Personality impact on vigilance performance. *Presented at the Showcase of Undergraduate Research Excellence at the University of Central Florida*. Orlando, FL.
24. Niederman, E., Diaz, D. A., Siler, J., **Sawyer, B. D.**, & Hancock, P. A., (2014). Driving performance while texting does not improve by using a familiar phone. *Presented at the Showcase of Undergraduate Research Excellence at the University of Central Florida*. Orlando, FL.
25. Greenstein, S., **Sawyer, B. D.**, Niederman, E., Oppold, P., & Hancock, P. A. (2013). Piloting with the PSUM Scale: Establishing usability first. *Presented at Vehicular 2013*. Nice, France.
26. Niederman, E., Price, J., **Sawyer, B. D.**, Hancock, P. A. (2013). Neatness of dress affects perceived personality. *Presented at the Association for Psychological Science 25th Annual Convention*. Washington, DC.
27. Laborde, P., Perkins, S., Niederman, E, **Sawyer, B. D.**, Hancock P. A. (2013). Surprising effects of priming on incidence of simulator sickness. *Presented at the Association for Psychological Science 25th Annual Convention*. Washington, DC.
28. Siler, J., **Sawyer, B. D.**, & Hancock, P. A. (2013). Generation and the Google effect: Transactive memory system preference across age. *Presented at the Showcase of Undergraduate Research Excellence*. Orlando, FL.
29. Laborde, P., Perkins, S., Niederman, E, **Sawyer, B. D.**, Hancock P. A. (2013). Simulation sickness: An unexpected effect of priming. *Presented at the Showcase of Undergraduate Research Excellence at the University of Central Florida*. Orlando, FL.
30. Niederman, E., **Sawyer, B. D.**, & Hancock, P. A. (2013). Contribution of physiological limitations of vision to change blindness. *Presented at the Showcase of Undergraduate Research Excellence at the University of Central Florida*. Orlando, FL.
31. Perkins, S., LaBorde, P., Niederman, E., **Sawyer, B. D.**, & Hancock, P. A. (2013). A replication of a surprising effect in a priming and simulation sickness study. *Presented at the Human Factors & Applied Psychology Student Conference at Embry-Riddle Aeronautical University*. Daytona Beach, FL.
32. Niederman, E., Price, J., **Sawyer, B. D.**, & Hancock, P. A. (2013). Can neatness of dress affect perceived personality? *Presented at the Human Factors & Applied Psychology Student Conference at Embry-Riddle Aeronautical University*. Daytona Beach, FL.
33. **Sawyer, B. D.**, Fok, A., Ludvigson, J, Hancock, P. A., (2012). Simulator sickness, dare I speak thy name? *Presented at American Psychological Association 2012 Annual Convention*. Orlando, FL.
34. **Sawyer, B. D.**, Teo, G, Mouloua, M., (2012). DriveID: Vehicle safety innovation through individuation. *Presented at the 11th Congress of the International Ergonomics Association*. Recife, Brazil.
35. Fok, A., Frischman, T., **Sawyer, B. D.**, & Mouloua, M, (2012). An evaluation of keyboard interface types on driver distraction. *Presented at the 11th Congress of the International Ergonomics Association*. Recife, Brazil.
36. Fok, A., Frischman, T., **Sawyer, B.**, & Robin, M. (2011). Effects of navigational interface type on distracted driving. *Presented at the 2011 Meeting of the Association for Psychological Science*. Washington, D.C.
37. Ryals, A. J., **Sawyer, B. D**., Nomi, J. S., Cleary, A. M., & Brown, A. S. (2010). Eliciting déjà vu using virtual reality: Support for the Gestalt familiarity hypothesis. *Presented at the Annual Meeting of the Psychonomic Society*. St. Louis, MO.
38. **Sawyer, B.**, & Clegg, B. A. (2010). Impact of components of text messaging on simulated driving performance. *Presented at the 2010 Meeting of the Association for Psychological Science*. Boston, MA.
39. Blalock, L. D., **Sawyer, B.**, Kiken A., & Clegg, B. A. (2010). The impact of load on dynamic versus static situational knowledge while driving. *Presented at the 80th meeting of the RMPA*. Denver, CO.

40. **Sawyer, B.**, Ahmed, A., Mong, H. M., & Clegg, B. A. (2009). Virtually there: A comparison of conventional navigational aids with HUD alternatives. *Presented at the 79th annual convention of the Rocky Mountain Psychological Association*. Albuquerque, NM.
41. **Sawyer, B.**, & Clegg, B. A. (2009). Cognitive versus motor components of text messaging impairment of driving. *Presented at the 79th annual convention of the Rocky Mountain Psychological Association*. Albuquerque, NM.

Selected Press Coverage

1. "Google Glass: Driving distraction cause or cure?" (2014) was covered by TV, radio and many print sources:
   a. Ackerman, E. (2014, September). Research Reveals Danger Of Texting While Driving With Google Glass. **Forbes.**
   b. Liston, B. (2014, September). Driving while texting with Google Glass as distracting as phone –study. **Reuters**.
2. Familiarity from the configuration of objects in 3-dimensional space and its relation to déjà vu: A virtual reality investigation. (2012) was covered in:
   a. Volk, P. (2013, April) Déjà vu in 3D. **Bild der Wissenschaft**
   b. Choi, C.Q. (2012, June) Been There, Done That—or Did I?: Déjà Vu Found to Originate in Similar Scenes. **Scientific American**
   c. Cleary, A. (2017) Déjà vu. **TEDx**

Volunteer Service

- Circular Cambridge Repair Café , 2017
- Martin Trust Center for MIT Entrepreneurship, 2016-2017
- MIT Make Cool ShMIT Student Hackathons, 2016-2017
- Military Officers Association of Sarasota, 2015
- Casselberry Art House Construction, 2014
- Audubon Center for Birds of Prey, 2012-2013
- Howard Phillips Center for Children & Family, 2011