Nicholas J. Kelling, Ph.D.

Curriculum Vitae

Associate Professor of Psychology
University of Houston-Clear Lake
School of Human Sciences and Humanities
2700 Bay Area Boulevard
Houston, TX 77058
e-mail: kelling@uhcl.edu

EDUCATION

2006 – 2009 Georgia Institute of Technology Ph.D. in Engineering Psychology
Thesis: *An Investigation of Human Sensitivity to Changes in Motion*
Minor: Physical Limitations of the Human User

2005 – 2006 Georgia Institute of Technology M.S. in Engineering Psychology
Thesis: *The Influence of Visual Perception on Vehicle Rates of Closure*

1997 – 2001 Georgia Institute of Technology B.S in Mechanical Engineering
Minor: Biomedical Engineering

PROFESSIONAL HISTORY

2019 – present Associate Professor of Psychology –University of Houston-Clear Lake
- Director of the Human Factors Psychology Concentration
- Lead Human Factors Engineer for the Exercise and Nutritional Health Institute at UHCL
- Core Faculty of Simulation and Serious Gaming B.A./M.S. Degree

2014 - 2019 Assistant Professor of Psychology –University of Houston-Clear Lake

2012 - 2014 Assistant Professor of Psychology – University of South Florida

2011 - 2012 Assistant Professor of Psychology – University of South Florida – Polytechnic
- Developer of B.S. in Engineering Psychology
- Developer of M.S. in Human Factors Integration
- Co-developer of B.S./M.S. in Systems Engineering

2009 - 2011 Assistant Professor of Psychology – Marshall University

RESEARCH GRANTS AND AWARDED FUNDS

AWARDED

2020 – 2021 NIEHS (2R44ES029348-02); *VR-Based Evaluation and Training System for Emergency Responders and Managers, Phase I* ($199,997; PI: W Buras; Role: Sub-award PI, $20,000).

2017 - 2018 Faculty Research & Support Funds (FRSF), UHCL; Smartphone-Delivered Behavioral Parent Training for Children with Attention-Deficit Hyperactivity Disorder ($4,500; Co-PI: N.J. Kelling)

2017 - 2018 NASA (H12.02-9628); *Adaptive Augmented Reality enabled electronic Procedure Toolset, Phase I* ($124,710; PI: M. Izygon; Role: Sub-Contractor - $20,690)

2016 - 2018 National Institute of Drug Abuse/NIH (N44DA-16-1208); *XDA – eXperimental Design Assistant, Phase II* ($999,390; PI: W Buras; Role Sub-Contractor - $350,000)

2015 - 2017 Faculty Research & Support Funds (FRSF), UHCL; *Investigation of Dual Task Paradigms for ADHD Classification* ($5,380; Co-PI: N.J. Kelling)

2012 - 2013 University of South Florida Internal Support Funds; *PolyVision Augmented Reality Mobile Application and University Community Program* ($10,000; Co-PI: N.J. Kelling)

2012 - 2013 University of South Florida Internal Support Funds; *Polytechnic Learning Center* ($10,000; Co-PI: N.J. Kelling)

2010 Nvidia Corporation Academic Partnership, Phase I Equipment Donation ($2,000; PI: N.J. Kelling)

2010 Marshall University Summer Research Award (PI: N.J. Kelling)

2009 Marshall University INCO Award for Faculty Development (PI: N.J. Kelling)

PUBLICATIONS

Kelling, N.J., Kelling, A.S., Walther, C.P., Johnston, A., and Elkins, S. (2021). Keep Calm and Conceal Carry: Opinions about Campus Carry on a Non-Traditional University Campus in Texas. The Social Science Journal. https://doi.org/10.1080/03623319.2021.1908809

Malin, D. H., Hetherington, S. A., Nghiem, D. M., Ward, C. P., Kelling, N., Izygon, J. J., ... & Buras, W. R. (2019). Software for designing rigorous and replicable preclinical research: The Experimental Design Accelerator. Journal of neuroscience research, 97(9), 1043-1050.

Kelling, A., Varma, S. G., & Kelling, N. J. (2019). A Multi-Faceted and Practical Analysis of Online Courses at UHCL. *International Journal of Teaching and Learning in Higher Education, 31(1),* 128-138.

Kelling, N. J., & Corso, G. M. (2018). The effect of spatial working memory capacity on ball flight perception. *Journal of Human Sport & Exercise, 13(4).*

Kelling, N.J., Gaalema, D.E., & Kelling, A.S. (2014). A Modified Operational Sequence Methodology for Zoo Exhibit Design and Renovation: Conceptualizing Animals, Staff, and Visitors as Interdependent Coworkers. *Zoo Biology, 33,* 336-348.

Kelling, N.J., Kelling, A.S., & Lennon, J.F. (2013). The Tweets that Killed a University: A Case Study Investigating the Use of Traditional and Social Media in the Closure of a State University. *Computers in Human Behavior, 29,* 2656-2664.

Kelling, A.S., Dampier, S.M.A., Kelling, N.J., Sandhaus, E.A., & Maple, T.L. (2012) Lion, Ungulate, and Visitor Reactions to Playbacks of Lion Roars at Zoo Atlanta. *Journal of Applied Animal Welfare Science*, *15*, 313-328.

PUBLISHED AND REFEERED CONFERENCE PROCEEDINGS

Klisans, D. E. V., & Kelling, N. J. (2017, September). Psycognia: The Development of a Passive Gaming Environment for Use in Undergraduate Psychology Classes. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 61, No. 1, pp. 412-416). Sage CA: Los Angeles, CA: SAGE Publications.

Avera, A., Kelling, N., Harper, C., Burks, R., & Bowman, H. (2017, September). Exploring the Optimal Number of Trials and Participants for Touchpad Testing Using Fitts-based Tasks. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 61, No. 1, pp. 367-371). Sage CA: Los Angeles, CA: SAGE Publications.

Kelling, N., Ward, C., Malin, D., Buras, W., & Hetherington, S. (2017, September). The Use of Human Factors to Address Medical Research Replicability Through the Development of Software Based Solution. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 61, No. 1, pp. 597-601). Sage CA: Los Angeles, CA: SAGE Publications.

Avera, A., Merta, M., Fournier, P., DeLeon, R., Kelling, N., & Sutherland, S. C. (2016, September). Reaching the Youth–Creating Entertaining and Educational HF/E Outreach Activities for Grades K-12. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 60, No. 1, pp. 425-429). Sage CA: Los Angeles, CA: SAGE Publications.

Merta, M., & Kelling, N. (2015). Effects of Level of Control on Simulator Sickness Using a Virtual Reality Head Mounted Device. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 59, No. 1, pp. 766-769). SAGE Publications.

Pham, T., & Kelling, N. (2015). Mechanical and Membrane Keyboard Typing Assessment Using Surface Electromyography (sEMG). In Proceedings of the

Human Factors and Ergonomics Society Annual Meeting (Vol. 59, No. 1, pp. 912-915). SAGE Publications.

Thomas, E., DeLeon, R., Kelling, N., & Harper, C. (2015). Arrow Key Configurations on Laptop Keyboards Performance and User Preference of the Inverted-T and Modified-T Layout. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 59, No. 1, pp. 1071-1074). SAGE Publications.

Kelling, N., & Kelling, A. (2014). ZooAR: Zoo based Augmented Reality Signage. Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting. Chicago, Il: Human Factors and Ergonomics Society

Kelling, N.J., Gaalema, D.E., & Kelling, A.S. (2012). Elephant in the Break Room: The use of modified operational sequence diagrams for the determination of zoo exhibit inefficiencies. Proceedings of the Human Factors and Ergonomics Society 56th Annual Meeting. Boston, MA: Human Factors and Ergonomics Society.

Kelling, N. J., Ryan, C. D., Halter, J. T., & Corso, G. M. (2008). Drivers and Passengers: Are the Perceptions of Brake Time the Same. Proceedings of the Human Factors and Ergonomics Society 52th Annual Meeting. New York, NY: Human Factors and Ergonomics Society.

Kelling, N. J., & Corso, G. M. (2007). The Influence of Lead Vehicle Behavior and Vehicle Rates of Closure on a Driver's Braking Behavior. Proceedings of the Human Factors and Ergonomics Society 51th Annual Meeting. Baltimore, MA: Human Factors and Ergonomics Society.

Kelling, N. J., & Corso, G. M. (2007). Prediction of Brake Onset Times for Rear End Collisions. Proceedings of the Fourth International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design, Stevenson, Washington.

Corso, G. M., & Kelling, N. J. (2007). Just Noticeable Differences for Vehicle Rates of Closure. Proceedings of the Fourth International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design, Stevenson, Washington.

PRESENTATIONS

Chapman-Lopez, T., Kelling, N. J., Arecemant, D. J., Amonette, W. E., & English, K. L. (2020). Effects of Virtual Reality During Rowing Ergometry on Metabolic and Performance Parameters. In International Journal of Exercise Science: Conference Proceedings (Vol. 2, No. 12, p. 96).

Arcemant, D. J., Kelling, N. J., Chapman-Lopez, T., Amonette, W. E., & English, K. L. (2020). Effects of Virtual Reality During Rowing Ergometry on Presence, Perceived Exertion, and Exercise Enjoyment. In International Journal of Exercise Science: Conference Proceedings (Vol. 2, No. 12, p. 93).

Lum, H. C., Hancock, G. M., Waldfogle, G. E., Scholcover, F., & Kelling, N. (2019, November). Putting the Applied in Applied Psychology: Experiential Learning Projects in the HFE Classroom. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 63, No. 1, pp. 506-510). Sage CA: Los Angeles, CA: SAGE Publications.

Klisans, D.V., Kelling, N.J., & Spinelli, M.L. (2018). *Effects of Screen Protector Material on User's Pressure Accuracy When Using a Stylus for Digital Art*. Poster presentation at the HCI International 2018 conference

Kelling, N.J. (2018). *Interface Researching VR and AR at the University of Houston Clear Lake*. Presentation at the 1st Annual Virtual Reality Symposium, Houston, TX.

Kelling, N., Amick, R. Z., Corso, G. M., Harper, C., Muddimer, A., & Peres, S. C. (2016, September). *Fork in the Road: Deciding Between Academia and Industry.* Discussion Panel at the Human Factors and Ergonomics Society Annual Meeting

Malin, D.H., Ward, C.P., Hetherington, S.A, Izygon, J.J., Nghiem, D.M., Kelling, N., and Buras, W.R. (October, 2015). *Interactive training software for designing, conducting and documenting rigorous preclinical experiments on drug dependence*. Presentation at Society for Neuroscience 2015 Annual Meeting.

Haist, B., Kelling, N.J., Harper, C.M. & Kotin, S. (May, 2015). *Magic 5 Hardware Usability*. Poster presentation at the 2015 Houston HFES One Day Symposium.

Smith, T., Becerra, Z., Corso, G.M., & Kelling, N.J. (November, 2014). *Detecting Changes in the Direction of a Moving Object*. Poster presentation at the 2014 Annual Meeting of the Kentucky Academy of Science.

Becerra, Z., Smith, T., Corso, G.M., & Kelling, N.J. (November, 2014). *Detecting Changes in the Continuity of a Moving Object*. Poster presentation at the 2014 Annual Meeting of the Kentucky Academy of Science.

Kelling, N. J., Bedwell, W., Corso, G.M., Cuevas, H. M., Keebler, J. R., Peres, S. C., & Walker, B. N. (October, 2014). *Variance in Academia: It is not all R1's out there and even those are not what you think*. Chair of Discussion Panel at the Human Factors and Ergonomics Society 58th Annual Meeting. Chicago, Il: Human Factors and Ergonomics Society

Kelling, N. J., Bedwell, W., Corso, G.M., Cuevas, H. M., Keebler, J. R., Peres, S. C., & Walker, B. N. (October, 2013). *Life, the Universe, and Academia: An Interactive Discussion on Balance and Early Success for Potential Academics*. Chair of Discussion Panel presented at the 57th Annual Meeting of the Human Factors and Ergonomics Society.

Kelling, N. J., & Kelling, A. S. (September, 2010). *Google Wave as Classroom Collaboration Tool in a Commuting Environment*. Presented at the 54th Annual Meeting of the Human Factors and Ergonomics Society.

Kelling, N. J., & Corso, G. M. (August 2008). *The Time is Now! Vehicles must fully adapt to drivers, not just their radio stations.* Presented at the 116th American Psychological Society Annual Convention, Boston, MA.

Kelling, N. J. (March 2007). *The Influence of Lead Vehicle Behavior and Vehicle Rates of Closure on a Driver's Braking Behavior.* Presented at the Georgia Institute of Technology Annual Graduate Student Research Symposium, Atlanta, GA.

Halter, J. T., Kelling, N. J., & Corso, G. M. (April 2006). *Effects of Vehicle Size on the Perception of Rates of Closure.* Poster presented at the Georgia Psychological Association Annual Student Research Poster Session, Atlanta, GA.

Kelling, N. J., & Corso, G. M. (March 2006). *Analysis of Roles of Visual Perception in Driving*. Poster presented at the Georgia Institute of Technology Annual Graduate Student Research Symposium, Atlanta, GA.

PATENTS

Kelling, N. J. & Corso, G. M., (2006). *Algorithm for the Prediction of Brake Onset Times in Driving.* Provisional Status. Georgia Institute of Technology, Atlanta, GA

AWARDS/HONORS

UHCL University Faculty Fellowship Award (2020-2021)
Georgia Tech Psychology Department Commendation on End of the Year Evaluation (Spring, 2007)
Georgia Institute of Technology Best Practices Challenge
Best of the Best Award for Research, Finance, and Institute Operations (Spring, 2005) *Network Based Time Document Solution*

PROFESSIONAL SERVICE

Member of the Program Committee for the Automotive UI 2012-2017 Conferences
Member of the Technical Program Committee for the Special Session on Intelligent Cooperative Driving and Autonomous Connected Vehicles at the 2014 International Conference on Collaboration Technologies and Systems
Member of the Technical Program Committee for The Social Car – Socially Inspired Car to X Interaction workshop Automotive UI 2012
Member of the Technical Program Committee for the Subliminal Perception in Cars Workshop at the Automotive UI 2011 Conference

Member of Human Factors and Ergonomics Society *Defining Human Factors/Ergonomics* Committee
Member of Human Factors and Ergonomics Society 2014 *Task Force of the HF Academic Job Market*
Reviewer for Human Factors and Ergonomics Society Annual Meetings and CHI conferences
Manuscript Reviewer for Human Factors, Brain and Cognition, Current Directions in Psychological Science, Computers in Human Behavior, Perceptual and Motor Skills, Applied Computing and Informatics, Journal of Tourism Management
Session Chair for the Surface Transportation Technical Group at the 54th Annual Meeting of the Human Factors and Ergonomics Society

PROFESSIONAL SOCIETIES AND COMMITTEES

Member of the Human Factors and Ergonomics Society
- Co-Chair of Workshops for the Annual Meeting (2018 - present)
- Chair of Education Technical Group (2015 – 2019)
- Member of Education and Training Committee (2015 – 2019)
- Member of Perception and Performance Technical Group
- Member of Environmental Technical Group
- Member of the Houston Human Factors and Ergonomics Society

Member of the Houston Human Factors and Ergonomics Society
- President (2020-present)
- President Elect (2019-2020)
- Member of the Executive Committee (2015-2017)
- Elections Director (2015-2017)
- Conference Committee Member for Houston HFES Annual Symposium (2015-2016)

UNIVERSITY SERVICE

Inaugural Chair of University Technology Advisory Board (2020 – 2021)
UHCL Budget Task Force (2020 - present)
Fall Teaching Workgroup (2020)
UHCL Faculty Senate (2017-2020)
Chair of Faculty Senate Budget Committee (2018-2020)
Faculty Senate Executive Committee (2018-2020)
Planning and Budget Shared Governance Committee (2017-2019)
Faculty Senate Curriculum Committee (2017-2018)
Search Committees
- Contract Funded Human Factors Engineer (2021)
- AVP Business Operations (2021)
- AVP/CIO of University Computing and Telecommunications (2019)
- Executive Director for Sponsored Programs (2016-2017)
- I/O Psychology (2015-2016)

Co-chair Applied Cognitive Psychology (2014-2015)
Experimental Psychology (2008-2009)
Co-Manager and Co-Creator of the UHCL HSH Faculty Writing Club (2015-2017)
Head of the HSH Psychology Website Redevelopment Project (2014-2015)
First Freshman Task Force – USF-Polytechnic (2011-2012)
Council on Technologies for Instruction and Research – USF-Polytechnic (2011-2012)
Ad-Hoc Recruitment and Retention Committee Marshall University (2010-2011)

TEACHING EXPERIENCE

University of Houston-Clear Lake

Graduate: Research Design and Statistics I & II, Sensation and Perception, Advanced Cognitive Psychology, Human Factors Engineering, Human Factors Methodology, Practicum in Human Factors, User Centered Design, Perception and Psychomotor Skills, Seminar in Applied Cognitive Psychology
Undergraduate: Behavioral Statistics, Social Sciences Research Techniques, Cognitive Psychology, Human Factors Psychology
Thesis: Jennifer Havens (2016, committee); Laura Parnell (2017, chair)

University of South Florida

Undergraduate: Applied Cognitive Psychology, Engineering Psychology, Perception, Research Methods, Tests and Measurement, Statistics, Human Factors (Industrial Engineering)

University of South Florida-Polytechnic

Undergraduate: Experimental Design & Analysis, Statistics, Perception, Research Methods

Marshall University

Undergraduate: Statistics, Experimental Psychology, Psychology of Machines, Engineering Psychology, Applied Cognitive Psychology, Psychology of Sport