LOGAN D. CLARK

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EDUCATION

PhD University of Virginia

Expected May 2023

Systems Engineering, Focus in Human Factors Advisor: Dr. Sara Riggs

ME University of Virginia

August 2021

Systems Engineering, Focus in Human Factors

Advisor: Dr. Sara Riggs

BS University of Central Florida

May 2018

Psychology Summa Cum Laude

WORK EXPERIENCE

Cognitive Systems Engineer Intern, 2nd Year Resilient Cognitive Solutions LLC, Pittsburgh, PA

Summer 2020

- Coordinated a team of interns to analyze complex work domains spanning the public and private sectors.
- Designed decision support displays to enhance operators' decision making in complex work environments.

Cognitive Systems Engineer Intern

Summer 2019

Resilient Cognitive Solutions LLC, Pittsburgh, PA

- Learned and applied a novel cognitive systems engineering (CSE) methodology to analyze and develop decision support systems for complex work domains in the public and private sectors.
- Worked with an interdisciplinary team of cognitive systems engineers, graphic designers, and software developers to design and develop next-generation decision support software.

Graduate Researcher

2018 to Present

Riggs Lab, University of Virginia

- Lead a research effort using motion tracking data to quantify how people interact with virtual reality interfaces.
- Responsible for literature review, designing and implementing experiments, analyzing results, and presenting the findings in technical reports, publications, and presentations.

Research Assistant 2016 to 2018

Transportation Research Group, University of Central Florida

- Conducted a program of independent research examining the effects of automation reliability on multitask performance.
- Responsible for experimental design, data collection, coding, and analysis.

PUBLICATIONS

Journal Articles

• Clark, L. D., Bhagat, A. B., & Riggs, S. L. (2020). Extending Fitts' law in three-dimensional virtual environments with current low-cost virtual reality technology. *International Journal of Human-Computer Studies*, 139, 102413.

Conference Papers

- Clark, L.D. & Riggs, S.L. (2022). VR-Based Kinematic Assessments: Examining the Effects of Task Properties on Arm Movement Kinematics. *CHI Conference on Human Factors in Computing Systems Extended Abstracts (CHI '22 Extended Abstracts)*. April 29-May 5, 2022.
- Clark, L.D. & Riggs, S.L. (2021). Movements Strategies in Virtual Reality: Exploring the Influence of 3D Endpoint Variability. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. (Vol. 65, No.1). Sage CA: Los Angeles, CA: SAGE Publications.
- Clark, L.D. & Riggs, S.L. (2020). Movements Strategies in Virtual Reality: The Influence of Effort Costs and Target Depth. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. (Vol. 64, No.1). Sage CA: Los Angeles, CA: SAGE Publications.
- Clark, L. D. & Riggs, S. L. (2019). Investigating the Use of Movement Kinematics to Assess Perceptual Ambiguity in Virtual Reality. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 63, No.1). Sage CA: Los Angeles, CA: SAGE Publications.

• Ferraro, J., Clark, L., Christy, N., & Mouloua, M. (2018). Effects of Automation Reliability and Trust on System Monitoring Performance in Simulated Flight Tasks. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 62, No. 1, pp. 1232-1236). Sage CA: Los Angeles, CA: SAGE Publications.

HONORS AND AWARDS

Scholarships and Fellowships	
Meta PhD Fellowship AR/VR Future Technologies Meta Inc.	2021
UVA Engineering Foundation Fellowship University of Virginia, School of Engineering and Applied Science	2020
Pegasus Gold Scholarship University of Central Florida	2015
Honors Enhancement Scholarship University of Central Florida	2015
Florida Academic Scholar Award Florida Bright Futures Scholarship Program	2015
Awards	
Best Student Paper HFES Perception and Performance Technical Group Movement Strategies in Virtual Reality: The Influence of Effort Costs and Target Depth	2020
Finalist, Human Factors in Healthcare Student Design Competition Human Factors and Ergonomics Society	2019

PRESENTATIONS

2021 Systems and Information Engineering Design Symposium

• Gerling G, Riggs SL, Heo S, Apostolellis P, Clark L & Rogers C (2021) Crafting an Effective Portfolio in User Experience Design. Workshop presented April 29, 2021.

2018 Southeastern Psychological Association Annual Meeting Charleston, SC

- Clark L, Guidubaldi A, Ferraro J, Christy N & Mouloua M (2018) The Effects of Automation Reliability and Task Load on Monitoring Performance in Simulated Flight Tasks. Poster presented March 8, 2018.
- Guidubaldi A, Clark L, Ferraro J, Mouloua S, Mouloua M (2018) *Individual Differences in Automated Task Monitoring*. Poster presented March 7, 2018.

9th International Conference on Applied Human Factors and Ergonomics Orlando, FL

- Clark L, Ferraro J, Christy N & Mouloua M (2018) Automation and Human Performance: Effects of Automation Reliability and Task Load. Poster presented July 22, 2018.
- Ferraro J., Clark L, Christy N, Mouloua S, Mangos P & Mouloua M (2018) Assessing UAS operator performance and workload during simulated search and rescue. Poster presented July 23, 2018.

2017 Human Factors and Ergonomics Society International Annual Meeting Austin, TX

- Ferraro J, Clark L, Christy N, & Mouloua M (2017). Impact of auditory interference on automated task monitoring and workload. Poster presented October 10, 2017.
- Ferraro J, Christy N, Clark L, Mouloua S, Mouloua M, & Mangos P (2017). Stealth adapt: Assessing UAS operator workload during search and rescue. Poster presented October 10, 2017.

TEACHING EXPERIENCE

University of Virginia, Charlottesville, VA Graduate Teaching Assistant

January 2020 to Present

- Courses:
 - Human Error in Complex Systems
 - o Human-Machine Interface
- Responsibilities:
 - o Coordinate teams of undergraduate teaching assistants.
 - Work with instructor to plan, deliver, and evaluate the effectiveness of lessons.
 - o Facilitate discussion sections, tutorials, and laboratory sections.

University of Central Florida, Orlando, FL **Teaching Assistant**

May 2017 to May 2018

- Courses:
 - o Research Methods in Psychology
 - Cognitive Psychology
 - Cross-Cultural Psychology
- Responsibilities:
 - o Facilitated discussion sections, tutorials, and laboratory sections.

- Corresponded with students to answer questions related to statistical analysis and experimental methodology.
- o Monitored student progress and generated weekly reports for instructor.

PROFESSIONAL SERVICE

Human Factors and Ergonomics Society Organizer, Student Career Day Co-Chair, Student Affairs Committee Secretary, University of Virginia Student Chapter Editor, Student Newsletter 2019-2022 Member, Evaluation Subcommittee 2018-2019

SOFTWARE PROFICIENCY

Programming:

- R
- MATLAB
- Python

Design:

- Illustrator
- Figma
- Premiere Pro
- Blender
- Photoshop

Research Tradecraft:

- Mendeley
- Zotero
- E-Prime

PROFESSIONAL AFFILIATIONS

Human Factors and Ergonomics Society Student Member	2017-Present
Association for Computing Machinery Student Member	2022-Present