T'kara Mullins, M.A.

tkara.mullins@gmail.com | (850) 450-5717

SUMMARY

Experimental psychologist with 8+ years of research experience. I am adept at experimental and survey design, physiological data collection, professional writing, and inferential and descriptive statistics. I am interested in human-computer interaction, team coordination, natural language processing, and user experience.

EDUCATION	
PHD Modeling, Simulation, and Training The University of Central Florida (UCF), Orlando, FL	Ant. 2027
MEng Modeling, Simulation, and Training, Summa cum laude The University of Central Florida (UCF), Orlando, FL	May 2025
MA Applied/Experimental Psychology, Summa cum laude Specialization: Cognitive Neuropsychology The University of West Florida (UWF), Pensacola, FL	July 2017
BA Psychology with Honors, Magna cum laude The University of West Florida, Pensacola, FL	July 2015

RESEARCH EXPERIENCE

Graduate Researcher, Cognitive Science Laboratory

2024- present

School of Modeling, Simulation, and Training, UCF

Investigating how to detect coordination breakdown during complex problem solving.

Graduate Researcher, Dynamix Lab

2022-2024

School of Modeling, Simulation, and Training, UCF

- Studied methods of nonlinear dynamic systems theory including fractals, wavelets, synchrony, and multidimensional recurrent quantification analysis.
- Conducted qualitative and quantitative analysis using R to investigate the influence of stigmatization on people's likelihood to reveal private health information on TikTok.
- Investigated how team dynamics evolve over time and influence overall team success with the Army Research Lab using MATLAB, python, and R.

Master's Researcher 2015- 2017

Psychology Department, UWF

• Conducted neuropsychological research on executive function to include detection, testing methodology, individual differences, and theoretical and clinical applications.

Graduate Research Assistantship, Cognitive Development Lab 2015- 2017 Psychology Department, UWF

 Assistant to Dr. Vanessa Rainey conducting primary and secondary source research on EEG application and analysis and event-related potential identification.

Graduate Research Assistant, Biomarker Discovery Lab

2016-2017

Biology Department, UWF

 Assistant to Dr. Rodney Guttmann creating gel plates tagged with phage bacteria to identify a phage that would selectively bind to proteins to allow for early detection of Alzheimer's disease.

Graduate Research Assistant, Cognitive Neuroscience Lab

2015-2017

Psychology Department, UWF

 Prepared the lab space in a vaulted EEG chamber, established EEG recording parameters, and applied the EEG electrodes to participations.

WORK EXPERIENCE

Business Analyst 2022- present

• Supported the maintenance and development of a series of applications used to track medical readiness of Sailors and Marines.

Testing Specialist/Statistician, Universal Consulting Services

2021-2022

 Researcher within the Operational Psychology lab for the Naval Aerospace Medical Institute (NAMI) working to improve the Aviation Selection Test Battery for the U.S. Navy.

Adjunct Professor of Psychology, Missouri State University •

2023- Present

Lectured within UWF's Psychology Department.

Adjunct Professor of Psychology, UWF

2018- Present

• Lectured within UWF's Psychology Department.

Care Coordinator, Sunshine Health LTC

2019-2021

• Interviewed patients with comorbid mental and physical health problems to fill care needs such as medical treatment, hospice care, and medication management services.

Therapist I, Lakeview

2018-2019

 Provided services to youth in individual and group settings using methods such as motivational interviewing and cognitive behavioral therapy while following a trauma informed care paradigm.

Psychometrist/Cognitive Trainer, Learning Connections of Pensacola

2016-2018

 Administered a battery of Tests of Cognitive Abilities to screen individuals for various developmental and learning delays and then led students aged 6-70 years through a structured program developed to train deficits in cognitive abilities.

PUBLICATIONS

- **Mullins, T.,** Naher, N., Rehovicova, K., Williams, A., & Amon, MJ. (2025). Self-Other Disclosures of Concealable Stigmatized Identities on TikTok: Implications for Interdependent Privacy. *Computer Supported Cooperative Work*. *In-press
- Margondai A., Willox, S., **Mullins, T.,** & Mouloua, M. (2025). Emotion-Aware Autonomous Vehicle Control-A Novel Framework for Driver State Management Through Adaptive Al-Driven Interventions. *Proceedings of the 2025 Annual Simulation Conference (ANNSIM'25)*.
- **Mullins, T.,** & Kaosaar, A., (2025). Leveraging the predictive power of team heart rate synchronization through nonlinear dynamics. *Proceedings of the Interdisciplinary Network for Group Research (INGRoup).*
- Mullins, T., Fiore, S.M. (2025). A Cognitive Efficiency Approach to Assessing

 Workload-Performance Trade-offs in Human-Autonomy Teams. *Proceedings of Applied Human Factors and Ergonomics Conference (AHFE)*.
- **Mullins, T.,** Necaise, A., Fiore, S.M., & Amon, M.J. (2024). Navigating Trust: The Interplay of Trust in Automation and Team Communication in an Extended Simulated Military Mission. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.

PRESENTATIONS

- **Mullins, T.,** Fiore, S.M. (2025). A Cognitive Efficiency Approach to Assessing Workload-Performance Trade-offs in Human-Autonomy Teams. *Proceedings of Applied Human Factors and Ergonomics Conference (AHFE)*.
- **Mullins, T.,** Necaise, A., Fiore, S.M., & Amon, M.J. (2024). Navigating Trust: The Interplay of Trust in Automation and Team Communication in an Extended Simulated Military Mission. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- Mullins, T., Rehovicova, K., Komives-Prieto, G., & Amon, M. J. (2023, August). Self-other Disclosures of Concealable Stigmatized Identities on Social Media. Graduate level poster accepted for presentation at the annual meeting of the University of Central Florida's Student Scholar's Symposium, Orlando, FL.
- Mullins, T., Rainey, V, & Pritchett, C., (2017, April). The validation of a novel child-friendly Stroop task using event-related potentials. Graduate level poster accepted for presentation at the annual meeting of the University of West Florida's Spring Scholar's Symposium, Pensacola, FL. *Outstanding Graduate Poster
- Vaugh, E., **Mullins, T.,** Sweeney, M., & Guttmann, R., (2017, April). *Tau-based biomarker development for early detection of Alzheimer's disease*. Poster accepted for presentation

at the annual meeting of the University of West Florida's Spring Scholar's Symposium, Pensacola, FL.

North, C., Brock, O., **Mullins, T.,** Sweeny, M., Medeiros, B., & Guttmann, R., (2017, April). *Novel Alzheimer's disease biomarker development in blood and cerebrospinal fluid.* Poster accepted for presentation at the annual meeting of the University of West Florida's Spring Scholar's Symposium, Pensacola, FL.

Mullins, T., and Guttmann, R., (2015, April). Reciprocity and the likelihood to accept charity.

Poster accepted for presentation at the annual meeting of the University of West
Florida's Spring Scholar's Symposium, Pensacola, FL. *Outstanding Psychology Poster *

Outstanding College of Science, Engineering and Health Poster

HONORS AND AWARDS

2024
2023
2023
2017
2017
2017
2017
2016
2015
2015
2015
2015
2015
2015
2015
2014

^{*}Full CV and professional references are available upon request. Please send all questions to tkara.mullins@gmail.com.