Daniel A. Delgado

+1 (754) 837-7742 • danieldel@ufl.edu

Degree Earned: July 2025

Degree Earned: May 2022

Degree Earned: August 2019

EDUCATION

PhD in Computer Science

University of Florida, Gainesville, FL

• **Dissertation Title**: Enhancing Collaborator Communication through Shared-Gaze Visualizations in Augmented Reality

MS in Computer Science

University of Florida, Gainesville, FL

• Advisor: Jaime Ruiz, PhD (*Ruiz HCI Lab*)

• Honors: McKnight Doctoral Fellow, Graduate Student Preeminence Award

BS in Computer Engineering

Florida State University, Tallahassee, FL

• Honors: Magna Cum Laude

RESEARCH INTERESTS

Collocated Collaboration in Augmented Reality. Eye-Tracking. Shared-Gaze Visualizations. Human-Computer Interaction. User Experience Design. Human-Machine Interface. Bio-sensors. Qualitative and Quantitative Analysis.

PUBLICATIONS

Delgado, D. A., Calvo, L. C., Bowers C. J., Ruiz, J. When Is Self-Gaze Helpful? Examining Uni- vs Bi-directional Gaze Visualization in Collocated AR Tasks. IEEE ISMAR. 2025.

Delgado, D. A., Barquero, A., Calvo, L. C., Wang, I., Ruiz, J., Anthony, L. *Navigating the Kitchen: Understanding User Needs for Task Guidance while Cooking.* ACM DIS. 2024.

Liu, Y., Park, J., **Delgado, D. A.**, Music, A., Berman, J., Ruiz, J., Kaber, D., Huang, H., and Zahabi, M. "Virtual Reality as a Platform for Upper-Limb Prosthetic Control Training and Early-Stage Design." Special Issue on User-Centered Innovations in Upper-Limb Prosthetics, (2025). (In Review)

Sherman, I., **Delgado, D. A.**, Gilbert, J. E., Ruiz, J., & Traynor, P. (2024). "I used to live in Florida": Exploring the Effects of Spam Call Warning Accuracy on Callee Decision-Making. USEC. 2024.

Junho, P., Music A., **Delgado D. A.**, Liu, Y., Berman, J., Zahabi, M., Ruiz, J., Kaber, D., Dang, H. (2023). Cognitive Workload and Usability of Virtual Reality Simulation for Prosthesis Training. IEEE SMC. 2023.

Sherman, I., **Delgado, D. A.**, Gilbert, J. E., Ruiz, J., & Traynor, P. (2021, August). *Characterizing User Comprehension in the STIR/SHAKEN Anti-Robocall Standard*. In TPRC49: The 49th Research Conference on Communication, Information and Internet Policy.

POSTERS

Delgado, D.A, Ruiz, J. Evaluation of Shared-Gaze Visualizations for Virtual Assembly Tasks. IEEE VR 2024.

AI Days Postering Session, The University of Florida – Gainesville, Florida

AWARDS

Best Poster Honorable Mention: IEEE VR 2024 Spring 2024

TEACHING

Teaching Assistant Programming II: Algorithm Abstraction & Design Spring 2025

• Grading exams and attending to discussion questions.

Instructor of Record Programming I: Python

Fall 2023

• Presenting class lectures, structuring lesson plans, and managing teaching assistants.

Teaching Assistant Programming II: Java

Summer 2023

• Hosting class labs, office hours, and guest lectures.

MENTORING

Undergraduate Student Mentor

Fall 2024

Mentored an undergraduate student in research projects involving augmented reality and industrial applications.

RESEARCH AND PROJECTS

Graduate Research

Shared-Gaze Visualizations in Augmented Reality

August 2023 – Present

• Enhancing collaborator communication through shared-gaze visualizations in augmented reality for industrial tasks.

NSF EMG Human-Machine Interface

August 2021 – December 2023

• Classifying EMG signals for human-machine interface.

Adaptive Task Guidance for Colocated Collaborators

August 2021 – May 2023

• Designing a context aware adaptive system for synchronous collaborative tasks.

ENKix: Enabling Knowledgeable Task Guidance In the extremes

August 2021 – December 2022

• Designing a novel and effective AR-based task guidance system designed to handle the characteristics found at the extremes.

Multimodal Affect Detection System

June 2020 – August 2021

• Utilizing multi-dimensional Convolutional Neural Networks for audio-visual emotion recognition.

Characterizing User Comprehension in the STIR/SHAKEN

February 2021 – July 2021

• Analyzing and coding user surveys for a new anti-spam protocol.

Communicating with Computers

September 2019 – June 2021

• Evaluating a multi-modal interactive AI through participant studies.

Undergraduate Research and Projects

IEEE SoutheastCon Robotics Competition, Florida State University

 Designing and implementing computer vision devices on stand-alone robot for automatic location and object detection.

Innovatech Engineering, LLC, Tallahassee, Florida

• Designing and assembling custom PCB hardware for underwater scuba diving tank refill pump and underwater depth detector.

Electrolytic Battery Cell Synthesis, Florida State University

• Synthesizing and testing lithium-ion battery cells for efficiency and duration.

Gonzalez and Sons Engineering Contractor, Medley, Florida

• Designed safety tags for heavy duty construction equipment and performed on-sight evaluations.

PROFESSIONAL MEMBERSHIPS

| Association of Computing Machinery (ACM) | January 2020 – Present |
|---|-----------------------------|
| Institute of Electrical and Electronics Engineers (IEEE) | December 2018 – Present |
| Special Interest Group on Computer-Human Interaction (SIGCHI) | January 2020 – January 2021 |
| Special Interest Group on Artificial Intelligence (SIGAI) | January 2020 – January 2021 |

SERVICE

Conference Reviewer ACM CHI Case Studies 2025

Conference Reviewer 2023 IEEE International Conference on Systems, Man, and Cybernetics (SMC)

Conference Reviewer ACM CHI Conference on Human Factors in Computing Systems 2023

Conference Reviewer ACM CHI Conference on Human Factors in Computing Systems 2022

TALKS

ACM DIS 2024 – Copenhagen, Denmark

IEEE VR 2024 - Orlando, Florida

Human-Centered Computing International Summit 2019 – Universidad El Bosque

IEEE Southeast Conference 2019 – Huntsville, Alabama