

Tiffany D. Do

PH.D. CANDIDATE · COMPUTER SCIENCE (HCI)

✉ dotiffany02@gmail.com | 🏠 zyrcant.github.io

Education

University of Central Florida

PH.D. COMPUTER SCIENCE

- Advisor: Dr. Ryan P. McMahan
- Research Interests: Virtual Agents, Human-AI Interactions, Virtual Reality and Augmented Reality

Orlando, FL

2020 - present

University of Texas at Dallas

M.S. COMPUTER SCIENCE

Richardson, TX

2018 - 2019

University of Texas at Dallas

B.S. COMPUTER SCIENCE

Richardson, TX

2016 - 2018

Research Experience

- 2023 **Ph.D. Research Intern**, Ability Team, HCAIX Group, Microsoft Research (MSR)
- 2020-Pres **Graduate Research Assistant**, eXtended Reality and Training (XRT) Lab, University of Central Florida
- 2018-2019 **Undergraduate Research Assistant (REU)**, University of Texas at Dallas

Publications

CONFERENCE PROCEEDINGS

1. Alec G. Moore, **Tiffany D. Do**, Nicholas Ruozzi, and Ryan P. McMahan (2023). "Identifying Virtual Reality Users Across Domain-Specific Tasks: A Systematic Investigation of Tracked Features for Assembly." *In Proceedings of 2023 IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, 2023, pp. 1-10. Acceptance rate: 21.2%
2. Jacob Belga, **Tiffany D. Do**, Ryan Ghamandi, Ryan P. McMahan, Joseph J. LaViola Jr. (2022). "Carousel: Improving the Accuracy of Virtual Reality Assessments for Inspection Training Tasks." *In ACM Symposium on Virtual Reality Software and Technology (VRST)*, 2022, pp. 1-10. <https://doi.org/10.1145/3562939.3565618>. Acceptance rate: 26.7%
3. **Tiffany D. Do**, Mamtaj Akter, Zubin Choudhary, Roger Azevedo, and Ryan P. McMahan. (2022). "The Effects of an Embodied Pedagogical Agent's Synthetic Speech Accent on Learning Outcomes." *In Proceedings of the 2022 ACM International Conference on Multimodal Interaction (ICMI)*, 2022, pp. 1-9. <https://doi.org/10.1145/3536221.3556587>. Acceptance rate: 33%
4. **Tiffany D. Do**, Ryan P. McMahan, and Pamela J. Wisniewski. (2022). "A New Uncanny Valley? The Effects of Speech Fidelity and Human Listener Gender on Social Perceptions of a Virtual-Human Speaker." *In Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*, 2022, pp. 1-11. <https://doi.org/10.1145/3491102.3517564>. Acceptance rate: 24.7%
5. **Tiffany D. Do**, Seong loi Wang, Dylan S. Yu, Matthew G. McMillian, and Ryan P. McMahan. (2021). "Using Machine Learning to Predict Game Outcomes Based on Player-Champion Experience in League of Legends." *In Proceedings of 2021 International Conference on the Foundations of Digital Games (FDG)*, 2021, pp. 1-5. <https://doi.org/10.1145/3472538.3472579>
6. **Tiffany D. Do**, Joseph J. LaViola Jr., and Ryan P. McMahan. (2020). "The Effects of Object Shape, Fidelity, Color, and Luminance on Depth Perception in Handheld Mobile Augmented Reality." *In Proceedings of 2020 IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, 2020, pp. 64-72. <https://doi.org/10.1109/ISMAR50242.2020.00026>. Acceptance rate: 28.8%
7. **Tiffany D. Do**, Dylan S. Yu, Salman Anwer, and Seong loi Wang. (2020). "Using Collaborative Filtering to Recommend Champions in League of Legends." *In Proceedings of 2020 IEEE Conference on Games (CoG)*, 2020, pp. 650-653. <https://doi.org/10.1109/CoG47356.2020.9231735>.

REFEREED EXTENDED ABSTRACTS AND POSTERS

1. **Tiffany D. Do** (2021). "Designing Virtual Pedagogical Agents and Mentors for Extended Reality". *In Proceedings of 2021 IEEE International Symposium on Mixed and Augmented Reality Adjunct (ISMAR-Adjunct)*, IEEE, 2021, pp. 486-489. <https://doi.org/10.1109/ISMAR-Adjunct54149.2021.00112>
2. **Tiffany D. Do**, Dylan S. Yu, Alyssa Katz, and Ryan P. McMahan. (2020). "Virtual Reality Training for Proper Recycling Behaviors". *In ICAT-EGVE 2020 - International Conference on Artificial Reality and Telexistence and Eurographics Symposium on Virtual Environments - Posters and Demos*, 2020, pp. 31-32. <https://doi.org/10.2312/egve.20201284>

Awards, Fellowships, & Grants

2022	Computer Science Merit Scholar (Paper Merit Award) , University of Central Florida	
2022	Graduate Presentation Fellowship , University of Central Florida	
2022	Doctoral Research Support Fellowship , University of Central Florida	
2020	Nominated: ECS Award for Excellence by a Graduate TA , University of Central Florida	
2020	IEEE CIS Student Travel Grant , IEEE Computer Information Society	
2020	CRA-WP Travel Grant , Computing Research Association - Widening Participation	
2016 - 2019	Academic Excellence Scholarship Honors (Full scholarship) , University of Texas at Dallas	\$ 72,953
2018	Grace Hopper Scholarship , University of Texas at Dallas	

Professional Experience

Microsoft Research (MSR)

Redmond, WA

PH.D. RESEARCH INTERN

May 2023 - Aug 2023

- Advised by Ed Cutrell, Martez Mott, and John Tang within the HCAIX (Human-Computing AI Experiences) Group at MSR
- Designed inclusive avatars for people with communication and mobility disabilities
- Used LLMs (GPT-4) to drive the affect and emotion of inclusive, expressive avatars
- Conducted a user study with adults with disabilities to improve AI-driven affective avatars

Axxess Technology Solutions

Dallas, TX

BACKEND ENGINEERING INTERN

May 2019 - Aug 2019

- C#.NET Developer for home healthcare software
- Developed an API in C#.NET for external clients to get/retrieve patient and prescription data
- Designed MySQL database tables for patient and prescription data

OnPoynt Aerial Solutions

Richardson, TX

FULL-STACK DEVELOPER INTERN

Aug 2018 - Dec 2018

- Developed a cross platform mobile application for drone racing as a social network using Ionic framework
- Designed all UX in Adobe Experience Design for the application

Teaching Experience _____

- Fall '23 **CAP 3104 Foundations of HCI**, Graduate Teaching Assistant
- July '21 **UCF Camp Connect: Advanced Research Camp**, Graduate Advisor
- Spring '21 **CGS 3763 Operating Systems Concepts**, Graduate Teaching Assistant
- Fall '20 **COP 3502 Computer Science 1 in C**, Lab Instructor, Graduate Teaching Assistant
- Spring '20 **COP 3502 Computer Science 1 in C**, Lab Instructor, Graduate Teaching Assistant

Academic Service & Outreach _____

PEER REVIEW

- 2023 **ACM CHI, IEEE ISMAR, IEEE VR**
- 2022 **IEEE ISMAR, IEEE VR, ACM CHI, ACM MM**
- 2021 **Springer Virtual Reality (VIRE), ACM MM (Emergency Reviewer)**

PROFESSIONAL OUTREACH

- 2023 **UCF Summer Undergraduate Research Fellowship (SURF)**, Fellowship Reviewer
- 2022 **Girls Who Code @ UCF**, Vice President, Founding member
- 2022 **ACM Human Factors in Computing Systems (CHI)**, Student Volunteer
- 2020-2022 **ACM-Women (ACM-W) at UCF**, Mentor
- 2018-2021 **National Center for Women & IT (NCWIT)**, Aspirations in Computing Volunteer