

Tiffany D. Do

ASSISTANT PROFESSOR · COMPUTER SCIENCE (HCI)

Drexel University, Philadelphia, PA, USA

✉ tiffany.do@drexel.edu | 🌐 zyrcant.github.io

Education

University of Central Florida

PH.D. COMPUTER SCIENCE

- Advisor: Dr. Ryan P. McMahan

Orlando, FL

2020 - 2024

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 Appointments

2024- **Assistant Professor**, Computer Science, Drexel University

2024-2024 **Ph.D. Research Intern**, Google, Labs

2023-2023 **Ph.D. Research Intern**, Microsoft Research (MSR)

2020-2024 **Graduate Research Assistant**, University of Central Florida

Publications

OUTPUT SUMMARY

- Google Scholar Profile: <https://scholar.google.com/citations?user=91XQQMkAAAAJ>
- Total Citations: **280+**; h-index: **9**; i10-index: **9**

JOURNAL PROCEEDINGS

1. Sagar Ashok Vankit, Vivian Genaro Motti, **Tiffany D. Do**, Samaneh Zamanifard, Deyrel Diaz, Andrew Duchowski, Bart Knijnenburg and Matias Volonte (2025). "Path Modeling of Visual Attention, User Perceptions, and Behavior Change Intentions in Conversations with Embodied Agents in VR." *In Computer Animation and Virtual Worlds 36*. <https://doi.org/10.1002/cav.70028>.
2. **Tiffany D. Do**, Juanita Benjamin, Camille Isabella Protko, and Ryan P. McMahan (2024). "Cultural Reflections in Virtual Reality: The Effects of User Ethnicity in Avatar Matching Experiences on Sense of Embodiment." *In IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG)*, pp. 1-12. <https://doi.org/10.1109/TVCG.2024.3456196>. Acceptance rate: 16.9%.
3. **Tiffany D. Do**, Camille Isabella Protko, and Ryan P. McMahan (2024). "Stepping into the Right Shoes: The Effects of User-Matched Avatar Ethnicity and Gender on Sense of Embodiment in Virtual Reality." *In IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG)*, pp. 1-10. <https://doi.org/10.1109/TVCG.2024.3372067>. Acceptance rate: 12.6%. 🏆 **IEEE VR 2024 Best Paper Honorable Mention (Top 3%)**
4. **Tiffany D. Do**, Steve Zelenty, Mar Gonzalez-Franco, and Ryan P. McMahan (2023). "VALID: A perceptually validated Virtual Avatar Library for Inclusion and Diversity." *In Front. Virtual Reality 4*. <https://doi.org/10.3389/frvir.2023.1248915>

HIGHLY SELECTIVE CONFERENCE PROCEEDINGS (ACCEPTANCE RATES < %30)

1. **Tiffany D. Do**, Usama Bin Shafqat, Elise Ling, and Nikhil Sarda (2025). "PAIGE: Examining Learning Outcomes and Experiences with Personalized AI-Generated Educational Podcasts." *In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI)*, pp. 1-12. <https://doi.org/10.1145/3706598.3713460>. Acceptance rate: 25.1% 🏆 **ACM CHI 2025 Best Paper (Top 1%)**

2. 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)*, pp. 1-10. <https://doi.org/10.1109/ISMAR59233.2023.00054>. Acceptance rate: 21.2%
3. Jacob Belga, **Tiffany D. Do**, Ryan Ghamandi, Ryan P. McMahan, and 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)*, pp. 1-10. <https://doi.org/10.1145/3562939.3565618>. Acceptance rate: 26.7%
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 (CHI)*, pp. 1-11. <https://doi.org/10.1145/3491102.3517564>. Acceptance rate: 24.7%
5. **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)*, pp. 1-9. <https://doi.org/10.1109/ISMAR50242.2020.00026>. Acceptance rate: 28.8%

OTHER REFEREED CONFERENCE PROCEEDINGS

[†]Undergraduate Advisee

1. Vishnu Menon[†], Andy Cherney[†], Elizabeth Cloude, Li Zhang, and **Tiffany D. Do** (2025). "Evaluating the Impact of LLM-guided Reflection on Learning Outcomes with Interactive AI-generated Educational Podcasts". To Appear in *Proceedings of the Artificial Intelligence in Measurement and Education Conference (AIME-Con 2025)*. NCME Special Interest Group on AI in Measurement. (Accepted, to appear in ACL Anthology).
2. Nathalia Gomez[†], S. Sue Batham[†], Matias Volonte, and **Tiffany D. Do** (2025). "Virtual Interviewers, Real Results: Exploring AI-Driven Mock Technical Interviews on Student Readiness and Confidence." To Appear in *Companion Publication of the 2025 Conference on Computer-Supported Cooperative Work and Social Computing (CSCW Companion '25)*, pp. 1-5. <https://doi.org/10.1145/3715070.3749227>
3. **Tiffany D. Do**, Martez Mott, John Tang, Sasa Junuzovic, Ann Paradiso, and Edward Cutrell (2025). "Exploring AI-Driven Affective Avatars for Autistic Adults and Adults with Social Anxiety in Virtual Meetings." In *Extended Abstracts of the 2025 CHI Conference on Human Factors in Computing Systems*, pp. 1-8. <https://doi.org/10.1145/3706599.3719885>. Acceptance rate: 32.8%
4. **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)*, pp. 1-9. <https://doi.org/10.1145/3536221.3556587>. Acceptance rate: 33%
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)*, pp. 1-5. <https://doi.org/10.1145/3472538.3472579>.
6. **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)*, pp. 1-4. <https://doi.org/10.1109/CoG47356.2020.9231735>.

REFEREED EXTENDED ABSTRACTS AND POSTERS

[†]Undergraduate Advisee

1. **Tiffany D. Do** and Kareem Edouard (2025). "Voices of Learning: Generating Culturally Relevant Educational Podcasts with AI". *Considering Cultural and Linguistic Diversity in AI Applications Workshop (CALD-AI workshop)*. pp. 1-2. <https://doi.org/10.5281/zenodo.15270377>
2. Camille Isabella Protoko[†], Ryan P. McMahan, and **Tiffany D. Do** (2024). "Lessons Learned in Designing Racially Diverse Androgynous Avatars". In *2024 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*. pp. 1-2. <https://doi.org/10.1109/VRW62533.2024.00178>.
3. **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. 1-4. <https://doi.org/10.1109/ISMAR-Adjunct54149.2021.00112>.

4. **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. 1-2. <https://doi.org/10.2312/egve.20201284>.

Professional Experience

Google (Labs@Google)

RESEARCH INTERN, LANGAPPS

Mountain View, CA

May 2024 - Aug 2024

- Conducted research on innovative applications of large language models (LLMs). Designed LLM-based prototypes in Python, emphasizing usability and real-world deployment.
- Led qualitative and quantitative user studies to evaluate effectiveness and usability of AI generated podcasts. Contributed to the NotebookLM AI podcast feature, deployed to over 9 million monthly users.
- Work recognized with a [Best Paper at CHI 2025](#).
- Contributed to other confidential research initiatives (details redacted).

Microsoft Research (MSR)

RESEARCH INTERN, ABILITY TEAM, HCAIX (HUMAN-COMPUTING AI EXPERIENCES) GROUP

Redmond, WA

May 2023 - Aug 2023

- Advised by Ed Cutrell, Martez Mott, and John Tang.
- Researched AI-driven affect and emotion in inclusive avatars using LLMs (GPT-4), Microsoft Mesh, and Unity (C#).
- Conducted a user study with adults with disabilities to enhance AI-driven avatar interactions.

Axxess Technology Solutions

BACKEND ENGINEERING INTERN

Dallas, TX

May 2019 - Aug 2019

- Developed home healthcare software as a C# .NET developer, focusing on backend patient experience.
- Built and tested APIs to enable secure access to patient and prescription data for external clients.
- Designed MySQL database tables to support automated patient prescription systems.

Awards, Fellowships, & Grants

2025	Best Paper (Top 1%) , ACM Conference on Human Factors in Computing Systems (CHI)	
2024	Best Paper Honorable Mention (Top 3%) , IEEE Virtual Reality and 3D User Interfaces (VR)	
2022	Doctoral Research Support Fellowship , University of Central Florida	
2016 - 2019	Academic Excellence Scholarship Honors (Full scholarship) , University of Texas at Dallas	\$ 72,953
2018	Grace Hopper Scholarship , University of Texas at Dallas	

Teaching Experience

Spring '25	Drexel CCI Digital Development High School Camp , Faculty, Curriculum Developer
Spring '25	CS 345 Game Design and Development , Instructor
Win. '24	CS 480T Augmented Reality Engineering , Instructor
Spring '24	CAP 5115 Virtual Reality Engineering , Graduate Teaching Assistant
Fall '23	CAP 3104 Foundations of HCI , Graduate Teaching Assistant
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

ACADEMIC SERVICE

2025	ACM Virtual Reality Software and Technology (VRST) , Technical Program Committee
2025	ACM Transactions on Computer-Human Interaction (TOCHI) , Outreach Editor
2022	ACM Multimedia (MM) , Technical Program Committee

PEER REVIEW

[†]Recognition for Outstanding Reviews

ACM CHI **2022, 2023, 2024[†], 2025[†]**
ACM UIST **2025[†],**
ACM CSCW **2024, 2025**
IEEE VR **2022, 2024, 2025**
IEEE ISMAR **2022, 2024**
ACM MM **2021, 2022**
Journal **Springer Virtual Reality (2021), IEEE SIGGRAPH (2024)**

OUTREACH

2025 **Drexel Women in Computing Society**, Faculty Advisor
2025 **Philly Codefest**, Judge
2022-2024 **Girls Who Code @ UCF**, Vice President, Co-founder
2020-2022 **ACM-Women (ACM-W) at UCF**, Mentor
2018-2025 **National Center for Women & IT (NCWIT)**, Aspirations in Computing Volunteer