

Angelique M. Taylor, Ph.D.

Computer and Information Science Department
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Research Interests: Artificial Intelligence, Human-Robot Interaction, Computer Vision, Robotics, and Health Informatics

Academic Appointments	Ph.D., Computer Science and Engineering University of California San Diego, San Diego, CA Dissertation: Human-Robot Teaming in Safety-Critical Environments - Perception of and Interaction with Groups Committee: Dr. Laurel D. Riek (Advisor), Manmohan Chandraker (UC San Diego), Virginia De Sa (UC San Diego), Sonia Martinez (UC San Diego), Nadir Weibel (UC San Diego), Marynel V'azquez (Yale University)	June 2021
	B.S., Electrical Engineering University of Missouri, Columbia, MO Research Advisor: Dr. Alina Zare	May 2015
	B.S., Computer Engineering University of Missouri, Columbia, MO Research Advisor: Dr. Alina Zare	May 2015
	A.S., Engineering Science Saint Louis Community College at Florissant Valley, Saint Louis, MO	May 2012
Research Appointments	Assistant Professor, Information Science Department, Cornell University	2022-Present
	Assistant Professor, Computer Science Department (Field Member), Cornell University	2022-Present
	Visiting Research Scientist, Meta Reality Labs, PRO Unlimited	2021-2022
	Postdoctoral Researcher, UC San Diego, Healthcare Robotics Lab	2021-2022
	Research Intern, Facebook Artificial Intelligence Research (FAIR)	2020
Awards and Honors	Microsoft Research Dissertation Grant [10 selected out of 300]	2019
	National Science Foundation Graduate Research Fellowship (NSF-GRFP) [11% acceptance rate]	2016
	Google Anita Borg Memorial Scholarship [10 selected across all of North America]	2016
	National Women in IT Collegiate Award – Grand Prize Winner	2021
	National Women in IT Collegiate Award – Honorable Mention	2019
	Arthur J. Schmitt Leadership in Science and Engineering Fellowship	2015
	National GEM Consortium Fellowship	
	Best Paper Honorable Mention, ACM Computer Supported Cooperative Work [top 5% of submissions]	2019
	UC San Diego Doctoral Award for Excellence in Service/Leadership	2018
	Grace Hopper Celebration of Women in Computing Scholarship (GHC)	2017
	ROSCon 2018 Diversity Scholarship	2018
D. E. Shaw Exploration Fellowship	2019	

Publications

Refereed Conference and Journal Publications

15. **Taylor, A.** “AI Designed With Humans in Mind.” *Issues in Science and Technology* 38, no. 4 (Summer 2022): 93–95.
14. **Taylor, A.,** Murakami, M., Kim, S., Chu, R., and Riek, L.D. (2022) “Hospitals of the Future: Designing Interactive Robotic Systems for Resilient Emergency Departments.” In *Proc. of the ACM Conference on Computer Supported Collaborative Work (CSCW)* [Acceptance rate: <30%]
13. **Taylor, A.** and Riek, L.D. (2022) “REGROUP: A Robot-Centric Group Detection and Tracking System.” In *Proc. of the 17th Annual ACM/IEEE Conference on Human Robot Interaction (HRI)*. [Acceptance rate: 24.8%] ***Best Paper Award***
12. **Taylor, A.,** Matsumoto S., Xiao, W., and Riek, L.D. (2021) “Social Navigation for Mobile Robots in the Emergency Department.” In *Proc. of International Conference on Robotics and Automation (ICRA)*.
11. **Taylor, A.,** Matsumoto, S., and Riek, L.D. (2020). “Situating Robots in the Emergency Department.” *AAAI Spring Symposium on Applied AI in Healthcare: Safety, Community, and the Environment*.
10. **Taylor, A.,** Chan, D., and Riek, L.D. (2020) “Robot-Centric Perception of Human Groups.” *ACM Transactions on Human-Robot Interaction (THRI)*, 9(3), pp.1-21.
9. **Taylor, A.,** Lee, H., Kubota, A., and Riek, L.D. (2019). “Coordinating Clinical Teams: Using Robots to Empower Nurses to Stop the Line.” In *Proc. of ACM Computer Supported Cooperative Work (CSCW)*. [Acceptance Rate: 30%] ***Best Paper Award Honorable Mention***
8. Chan, D., **Taylor, A.,** and Riek, L.D. (2017). “Faster Robot Perception Using Salient Depth Partitioning.” In *Proc. of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. pp. 1-6.
7. **Taylor, A.** and Riek, L.D. (2016). “Robot Perception of Human Groups in the Real World: State of the Art.” In *Proc. of the AAAI Fall Symposium on Artificial Intelligence in Human-Robot Interaction (AI-HRI)*.
6. Lobzhanidze, A., Gentry, P., **Taylor, A.,** Zeng, W. (2013) “Mainstream Media vs. Social Media for Trending Topic Prediction – An Experimental Study.” In *Proc. IEEE 10th Consumer Communications and Networking Conference (CCNC)*, pp 729-732, Las Vegas, Nevada.

Refereed Workshop Publications

5. **Taylor, A.** and Riek, L.D. (2018). “Robot-Centric Human Group Detection.” In *Proc. of Social Robots in the Wild, Workshop at the 13th Annual ACM/IEEE International Conference on Human-Robot Interaction (HRI)*.
4. **Taylor, A.** and Riek, L.D. (2017) Robot Affiliation Perception for Social Interaction. In *Proc. of Robots in Groups and Teams Workshop at CSCW*. pp. 1-4.

Refereed Abstracts and Posters

3. **Taylor, A.** and Riek, L.D. (2017) “Robot Perception of Social Engagement Using Group Joint Action.” In Proceedings of the 7th Annual Joint Action Meeting (JAM).
2. **Taylor, A.,** and Riek, L. D. (2016). Holistic Perception Algorithms for Mobile Robots. In Midwest Robotics Workshop (MWRW).
1. **Taylor, A.,** Du, X., Chen, C., Zare, A. (2014) “Context Dependent Target Detection,” Computational Intelligence Society Poster Competition, University of Missouri, Columbia.

Grants

Robot Navigation in Safety-Critical Environments PI: Angelique Taylor Microsoft Dissertation Award \$25,000	2019-2020
National Women in Information Technology Award PI: Angelique Taylor \$2,000	2019
D.E. Shaw Fellowship PI: Angelique Taylor \$2,000	2019
Human-Robot Teaming in Safety-Critical Environments PI: Angelique Taylor National Science Foundation Graduate Research Fellowship Program \$120,000	2016-2019
Grace Hopper Celebration of Women in Computing (GHC) Award PI: Angelique Taylor \$2,500	2017
Google Anita Borg Memorial Award PI: Angelique Taylor \$10,000	2016-2017
National GEM Consortium Travel Grant PI: Angelique Taylor \$2,000	2016
National Society of Blacks in Computing Travel Grant PI: Angelique Taylor \$2,000	2016
Institute in Chicago Midwest Robotics Travel Grant PI: Angelique Taylor \$1,000	2016

Professional Experience	Meta Reality Labs Research, PRO Unlimited <i>Visiting Research Scientist, PRO Unlimited</i>	2021-2022
	Facebook Artificial Intelligence Research (FAIR) <i>Research Intern</i>	2020
	Apple Inc., Artificial Intelligence (AI) Education <i>Teaching Assistant, PRO Unlimited</i>	2019-2021
	The Boeing Company, EA-18G & EW Electronic Warfare <i>Software Intern</i>	2015
	The Boeing Company, Phantom Works, Strategic Development and Experimentation, Technology and Operations <i>Software Intern</i>	2014
	The Boeing Company, F-15 Mission Systems <i>Software Intern</i>	2013
Teaching Experience	Cornell Tech, Cornell University INFO 5368:030 Practical Applications in Machine Learning	Spring 2023
	Cornell Tech, Cornell University INFO 5356:030 Introduction to Human-Robot Interaction	Fall 2022
	PRO Unlimited: Apple Inc., Artificial Intelligence (AI) Education <i>Teaching Assistant</i>	2019-2021
	University of California San Diego <i>Mentored Students on Writing Successful Grant Applications</i> Informal Mentoring	2020
	University of California San Diego <i>Graduate Panel for New Black Graduate Students</i> Black Graduate Student Association – Black Student Union	2020
	University of California San Diego <i>Graduate Mentor</i> Black Graduate Student Association – Black Student Union	2019
	National Society of Blacks in Computing <i>Panel on Writing and Publishing</i> Black Graduate Student Association – Black Student Union	2019
	University of California San Diego <i>Teaching Assistant</i> Introduction to Human-Robot Interaction	2018
	University of California San Diego <i>Graduate Panel for New Computer Science Graduate Students</i>	2018

Black Graduate Student Association – Black Student Union

Student Mentoring

Nabil Koney-Laryea (B.S., Computer Science, University of Florida)	Summer 2023
Jalynn Nicoloy (B.S., Computer Science, Colorado State University)	Sumer 2023
Sridula Rao Kunamneni (B.S., Computer Science, Cornell University)	2023
Tauhid Tanjim (Ph.D., Information Science, Cornell Tech)	2022-Present
Nhan Tran (Ph.D., Computer Science, Cornell University)	2022-Present
Tiantian Li (B.S., Computer Science, Cornell University)	2022-Present
Soyon Kim (B.S., Mathematics, UC San Diego)	2021-2022
Michele Murakami (B.S., Cognitive Science, UC San Diego)	2021-2022
Sandhya Jayaraman (M.S., Computer Science and Engineering, UC San Diego)	2021-2022
Soham Satyadharma (M.S., Computer Science and Engineering, UC San Diego)	2021-2022
Ryan Chu (B.S., Computer Science and Engineering, UC San Diego)	2020-2022
Wesley Xiao (B.S., Computer Science and Engineering, UC San Diego)	2019- 2021
Joymaneeet Kaur (B.S., Computer Science and Engineering, UC San Diego)	2019
Per Antoine Carlsen (M.S., Computer Science and Engineering, UC San Diego)	2018-19
Elyas Obbad (B.S., Engineering and Applied Science, UC San Diego)	2018
Ziwen Zeng (B.S., Cognitive Science, UC San Diego)	2018
Renu Singh (B.S., Computer Science, UC San Diego)	2017-18
Astha Mehta (B.S., Cognitive Science, UC San Diego)	2017

Invited Talks

Data-Driven Urban Tech: How Machine Learning and Optimization Addresses Today’s Urban Challenges	May 2023
The Center for Health Design Journal Club	May 2023
Introduction to HRI, Guest Lecturer, University of Virginia	April 2023
Northeast CSCW Meetup, Panel on ‘Data’s Social Complexities’	November 2022
Extended Reality (XR) Retreat on ‘XR for HRI’	October 2022
Cornell Weil Symposium, ‘Perception and Decision-Making Systems for Human-Robot Teaming in Safety-Critical Environments’	October 2022
MI484 Human-Robot Interaction, Guest Lecturer, Michigan State University	November 2022
Robots and Humans, Guest Lecturer, University of Virginia	November 2022
Close-Proximity Human-Robot Collaboration Workshop, Robotics Science and Systems (RSS) Conference	June 2022
Social Robot Navigation: Advances and Evaluation Workshop at the International Conference in Robotics and Automation (ICRA)	May 2022
UC San Diego Robotics Seminar	March 2022
Cornell University Robotics Seminar	February 2022
Cornell University Information Science Seminar	February 2022
UC San Diego Robotics Seminar	March 2022
Safe and Robust Control of Uncertain Systems Workshop, NeurIPS	December 2021
Michigan State, Guest Lecture	November 2021
Meta AI Organization, Seminar	October 2021
SORG Lab, Massachusetts General Hospital, Harvard University	July 2021
International Conference on Machine Learning (ICML), Women in ML	July 2021
MIT Computer Science & Artificial Intelligence Lab	July 2021
University of Michigan, Seminar	April 2021
Washington University in St. Louis, Seminar	March 2021
Yale University, Seminar	March 2021
University of Virginia, Humans and Robots Course	March 2021
Carnegie Mellon University, Seminar	February 2021

Georgia Institute of Technology, Seminar	February 2021
Cornell University, Seminar	February 2021
Vanderbilt University, Seminar	February 2021
University of California Los Angeles, Seminar	January 2021
Brown University, Robotics Seminar	December 2020
University of Toronto, Healthcare Robotics (HeRo) Seminar Series	November 2020
Building Entertaining Robots Workshop in the International Conference on Social Robotics (ICSR)	November 2020
Michigan State University, Innovative Interfaces Course, Guest Lecturer	November 2020
Michigan AI Symposium on AI & Health	October 2020
Ada Lovelace Day Celebration Women in Robotics, Panel Talk	October 2020
UC San Diego, Introduction to Human-Robot Interaction	March 2019
UC San Diego, The American Academy of Arts and Sciences Design Lab	May 2019
UC San Diego, Introduction to Human-Robot Interaction, Guest Lecturer	February 2018

Academic Service

Reviewer , Affective Computing and Intelligent Interaction (ACII)	2023, 2017
Reviewer , Robotics: Science and Systems (RSS)	2023, 2019
Reviewer , IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)	2023
Reviewer , IEEE Robotics and Automation (RA-L) Letters	2022
Reviewer , Frontiers in Robotics and AI	2022
Reviewer , Transactions of Human-Robot Interaction (THRI)	2021-22
Reviewer , RO-MAN 2021 Workshop on Robot Behavior Adaptation to Human Social Norms	2021
Reviewer , Paladyn. Journal of Behavioral Robotics	2019
Reviewer , IEEE Transactions on Robotics (T-RO)	2019, 2021
Student Volunteer , Conference on Human-Robot Interaction	2018, 2020
Reviewer , ACM Conference on Computer-Supported Cooperative Work (CSCW)	2018
Reviewer , ACM/IEEE Conference on Human-Robot Interaction (HRI)	2017 -Present
Reviewer , IEEE Symposium on Robot and Human Interactive Communication (RO-MAN)	2017
Student Volunteer , Recruiter of Prospective Computer Science Faculty at UCSD	2017
Reviewer , Conference on Human-Robot Interaction (HRI)	2017
Reviewer , AAAI Symposium on AI in Human-Robot Interaction (AI-HRI)	2016
Reviewer , IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)	2016

Academic Service

Affective Computing and Intelligent Interaction, Program Committee	2023
Young, Black, and Tenure Track Workshop, CMD-IT/ACM Richard Tapia	2023
Celebration of Diversity in Computing Conference, Organizer	
Human Robot Interaction, Program Committee	2022-23
Human Robot Interaction, Organizing Committee	2022-23
Faculty Advisor for Black Cornell Tech Graduate Student Association	2022-Present
PHD Dissertation Committee Member for Houston Clare (Cornell Tech)	2022
Broadening Participation in Information Science Committee (Cornell Tech)	2022-Present
Visit Day Co-Lead (UC San Diego)	2018-2020
Department Visit Day Robotics Group Lead (UC San Diego)	2017
Graduate Student Recruiter of Prospective Faculty (UC San Diego)	2017

Outreach	Invited Speaker Women in Computing at Cornell High School Programming Contest	2023	
	Mentor Queen’s Tech Fair, Black Cornell Tech Student Association Mentoring Session	2023	
	Invited Speaker Cornell Tech Panel on ‘Applying to Tenure-Track Jobs’	2022	
	Reviewer Cornell Tech PhD Fellowship Application Night	2022	
	Panel Member University of Missouri, McNair Scholars Program - Opportunities with a PhD outside of Academia Panel	December 2021	
	Invited Speaker Michigan State, Speaking Engagement on ‘Advice on being on the academic job market’	2021	
	Invited Speaker Fireside Chat with Innoverge	2021	
	Invited Speaker INTech Camp for Girls	2021	
	Organizer Introduction to Robotics Workshop for Black Women in AI Week	2020	
	Invited Speaker F.A.N.C.Y Teen Girls Expo, San Diego, CA	2017-2018	
	Invited Speaker Blue Heart Foundation Workshop, San Diego, CA	2017	
	Mentor Code Success @ NSBE	2017	
	Invited Speaker Notre Dame National Robotics Week Event	2016	
	Invited Speaker University of Notre Dame Hispanic Engineers and Scientists STEM Carnival	2015	
	Professional Affiliations & Leadership	The Institute of Electrical and Electronics Engineers (IEEE) Member	2022-Present
		IEEE Robotics and Automation (RA-L) Letters	2022-Present
Association for Computing Machinery (ACM)		2020-Present	
UC San Diego Graduate Robotics Association (President from 2018-2019)		2018-2020	
Black Graduate Student Association		2016 - 2021	
American Association of University Women		2016 - 2021	
Association for Women in Science, University of Notre Dame		2016	
Press	Eta Kappa Nu, Electrical and Computer Engineering Honor Society (Vice President from 2013-2021)	2013 - 2021	
	<u>PC Magazine, Teaching Robots to Navigate Hectic Emergency Rooms Is No Easy Task</u>	2021	
	<u>UC San Diego Television, Improving Human-Robot Interaction</u>	2018	
	<u>UC San Diego Jacobs School of Engineering Blog, UC San Diego at RoboCup 2017</u>	2017	