

# Alexandra Bejarano

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## EDUCATION

### Ph.D. Computer Science

Golden, CO | Aug 2020 - Present

COLORADO SCHOOL OF MINES

Teaching Assistant (TA): Computer Vision, Robot Ethics

Coursework: Human-Robot Interaction; Computer Vision; Human-Centered Robotics; Robot Ethics; Theory of Computation; Advanced Computer Architecture; Augmented Reality; Fundamentals of College Teaching; Social and Collaborative Computing

### M.S. Computer Science

Golden, CO | Dec 2022

COLORADO SCHOOL OF MINES

Worked on alongside Ph.D. program.

Project: Conducted literature review of interactions and perceptions of robot groups. Designed and completed a human-subject study exploring trust distribution among a robot group based on the identity performance of the group.

### B.S. Computer Science

Tulsa, OK | May 2020

UNIVERSITY OF TULSA

## RESEARCH EXPERIENCE

### Colorado School of Mines | RESEARCH ASSISTANT, MIRRORLAB

Golden, CO | Aug 2020 – Present

Advised by Dr. Tom Williams. Research on robot group identity performance strategies and user mental model formation in Human-Robot Interaction. Work on design and implementation of multi-robot control interfaces.

### University of Tulsa | RESEARCH ASSISTANT

Tulsa, OK | Jan 2019 - July 2020

Advised by Dr. Sandeep Kuttal. Researched remote human-human pair programming looking at gender differences, human-computer pair programming, and computer programmers' online foraging behavior to inform Human-Computer Interaction technology design.

### University of Notre Dame | RESEARCH ASSISTANT

Tulsa, OK | May 2019 - July 2019

Advised by Dr. Aaron Striegel. Participated in an NSF Research Experience for Undergraduates (REU) Program at the University of Notre Dame's Wireless Institute. Researched the use of network data packets and signal interference towards the development of a system in which WiFi may be used to detect tree leaves for optimal leaf pickup.

### Oregon State University | RESEARCH ASSISTANT

Tulsa, OK | May 2018 - July 2018

Advised by Dr. Kagen Tumer. Participated in an NSF Research Experience for Undergraduates (REU) Program at OSU's Autonomous Agents and Distributed Intelligence Lab. Researched the use of counterfactuals in reinforcement learning to enhance the performance of intelligent agents within a simulated multiagent rover domain.

### University of Tulsa | RESEARCH ASSISTANT

Tulsa, OK | May 2016 - Aug 2017

Advised by Dr. Julio Diaz. Researched robot design for Human-Robot Interaction through manipulation of robot appearance and a user controls interface to assist children with special needs to play.

## PROFESSIONAL SERVICE & OUTREACH

### Conferences & Journals | PAPER REVIEWER

Present

ACM CHI Conference - 2024

IEEE RO-MAN Conference - 2023

ACM/IEEE International Conference on Human-Robot Interaction - 2022, 2024

International Journal of Social Robotics - 2022

ICSR Workshop HRI for Space Robotics - 2021

### Mines Graduate Student Government | DIRECTOR OF MEDIA AND MARKETING

Present

### Summer Multicultural Engineering Training Program | WORKSHOP ORGANIZER

June 2023

Organized and ran interactive robot design workshops for high students in the SUMMET program.

### HRI Pioneers Workshop | 2023 ORGANIZING COMMITTEE - WEB/PUBLICITY CHAIR

May 2022 - March 2023

**Mentorship | GRADUATE MENTOR**

Mar 2021 - Present

Guided high school (2) and undergraduate students (4) in research.

**Society of Hispanic Professional Engineers | OUTREACH ORGANIZER AND VOLUNTEER**

2019-2022

**CSM Chapter:** National Dia de Ciencias Volunteer, assisted with event set up, sign in, and activity engagement for local Colorado high school students. - Sept 2022**TU Chapter:** Noche Dia de Ciencias STEM Activity Lead, organized STEM activities for Tulsa area middle and high school students. - 2019, 2020

## RECOGNITIONS

**Trefny Graduate Teaching Fellowship | FELLOW**

August 2023 - May 2024

**HRI Pioneers Workshop | SELECTED FOR 2022 COHORT**

March 2022

**NSFGRFP | HONORABLE MENTION**

Jan 2021

**NSFGRFP | HONORABLE MENTION**

Jan 2020

**Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) | SCHOLAR**

2016 - 2020

## PUBLICATIONS

**No Name, No Voice, Less Trust: Robot Group Identity Performance, Entitativity, and Trust Distribution |**ALEXANDRA BEJARANO, TOM WILLIAMS2023 32nd IEEE International Conference on Robot and Human Interactive Communication. [Read Paper](#)**Conversations with Identity Performing Robots: Considerations for Algorithms and Interfaces |**ALEXANDRA BEJARANO, SEBASTIAN NEGRETE-ALAMILLO, TOM WILLIAMSWorkshop on Human-Robot Conversational Interaction at HRI 2023. [Read Paper](#)**You Had Me at Hello: The Impact of Robot Group Presentation Strategies on Mental Model Formation |**ALEXANDRA BEJARANO, SAMANTHA REIG, PRIYANKA SENAPATI, TOM WILLIAMS2022 ACM/IEEE International Conference on Human-Robot Interaction. [Read Paper](#)**Robot Co-design Can Help Us Engage Child Stakeholders in Ethical Reflection | TERRAN MOTT,**ALEXANDRA BEJARANO, TOM WILLIAMS2022 ACM/IEEE International Conference on Human-Robot Interaction. [Read Paper](#)**Understanding and Influencing User Mental Models of Robot Identity | ALEXANDRA BEJARANO, TOM****WILLIAMS**Pioneers Workshop at HRI 2022. [Read Paper](#)**Designing for Perceived Robot Empathy for Children in Long-Term Care | ALEXANDRA BEJARANO, OLIVIA****LOMAX, PEYTON SCHERSCHEL, TOM WILLIAMS**2021 International Conference on Social Robotics. [Read Paper](#)**Design, Performance, and Perception of Robot Identity | RYAN BLAKE JACKSON, ALEXANDRA BEJARANO,****KATIE WINKLE, TOM WILLIAMS**Workshop on Robo-Identity: Artificial identity and multi-embodiment at HRI 2021. [Read Paper](#)**On the Flexibility of Robot Social Identity Performance: Benefits, Ethical Risks and Open Research Questions for HRI | KATIE WINKLE, RYAN BLAKE JACKSON, ALEXANDRA BEJARANO, TOM WILLIAMS**Workshop on Robo-Identity: Artificial identity and multi-embodiment at HRI 2021. [Read Paper](#)**How end-user programmers forage in online repositories? An information foraging perspective |****SANDEEP KUTTAL, SE YEON KIM, CARLOS MARTOS, ALEXANDRA BEJARANO**2021 Journal of Computer Languages, Vol. 62. [Read Paper](#)**Cognitive Architectural Control for Free-Flying Robots on the Lunar Orbital Platform-Gateway | JON****EMMANUEL SERRANO, SHANIA JO RUNNINGRABBIT, SAYANTI ROY, ALEXANDRA BEJARANO, TOM WILLIAMS**2020 International Conference on Social Robotics. [Read Paper](#)

**Identity Performance in Multi-Robot Distributed Systems** | TOM WILLIAMS, DANIEL AYERS, CAMILLE KAUFMAN, JON SERRANO, SHANIA JO RUNNINGRABBIT, SAYANTI ROY, POULOMI PAL, [ALEXANDRA BEJARANO](#), RYAN BLAKE JACKSON

2020 International Conference on Social Robotics. [Read Paper](#)

**Remote pair programming in online CS education: Investigating through a gender lens** | SANDEEP KUTTAL, KEVIN GERSTNER, [ALEXANDRA BEJARANO](#)

2019 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC). [Read Paper](#)

## PRESENTATIONS

**No Name, No Voice, Less Trust: Robot Group Identity Performance, Entitativity, and Trust Distribution** | ALEXANDRA BEJARANO, TOM WILLIAMS

Oral presentation at the IEEE International Conference on Robot and Human Interactive Communication, August 2023.

**Interfaces and Architectural Mechanisms for Multi-Robot Control** | ALEXANDRA BEJARANO, TOM WILLIAMS  
Poster presentation at the DCIST PI Meeting at the University of Pennsylvania, June 2023.

**Conversations with Identity Performing Robots: Considerations for Algorithms and Interfaces** | ALEXANDRA BEJARANO, SEBASTIAN NEGRETE-ALAMILLO, TOM WILLIAMS

Oral presentation at the workshop on Human-Robot Conversational Interaction at HRI, March 2023.

**No Name, No Voice, Less Trust: Robot Group Identity Performance, Entitativity, and Trust Distribution** | ALEXANDRA BEJARANO, TOM WILLIAMS

Poster presentation at the Rocky Mountain Celebration of Women in Computing, September 2022.

**You Had Me at Hello: The Impact of Robot Group Presentation Strategies on Mental Model Formation** | ALEXANDRA BEJARANO, SAMANTHA REIG, PRIYANKA SENAPATI, TOM WILLIAMS

Oral presentation at the ACM/IEEE International Conference on Human-Robot Interaction, March 2022

**Understanding and Influencing User Mental Models of Robot Identity** | ALEXANDRA BEJARANO, TOM WILLIAMS

Oral presentation at the HRI Pioneers Workshop, March 2022

**Perceived Robot Empathy within Social Robot Design for Hospitalized Children** | ALEXANDRA BEJARANO, OLIVIA LOMAX, PEYTON SCHERSCHEL

Poster presentation for Computing-Mines Affiliates Partnership Program, Colorado School of Mines, Golden, CO 2020

**WiFi Leaf Detection System** | ALEXANDRA BEJARANO, AARON STRIEGEL

- Poster presentation at the Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) Research Symposium, Stillwater, Oklahoma 2019.
- Poster presentation at the Summer Undergraduate Research Symposium (SURS), University of Notre Dame, Notre Dame, Indiana 2019.

**Counterfactuals in a Multiagent Domain** | ALEXANDRA BEJARANO, CONNOR YATES, GOLDEN ROCKEFELLER, KAGAN TUMER

- Oral presentation at the National Conference on Undergraduate Research, Kennesaw, Georgia 2019.
- Poster presentation at the Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) Research Symposium, Stillwater, Oklahoma 2018.

**Robot Design for Human Interaction** | ALEXANDRA BEJARANO

- Oral presentation at the National Conference on Undergraduate Research, Edmond, Oklahoma 2018.
- Oral presentation at the Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) Research Symposium, Stillwater, Oklahoma 2017.