

Alexandra Bejarano

abejarano@mines.edu | [linkedIn/alexandra-bejarano-04474b11a](https://www.linkedin.com/in/alexandra-bejarano-04474b11a) | abejarano.com

SKILLS | Java, Python, Javascript, C++, Unity, ROS, Human-Subject Experimental Design, Qualitative Research Methods, Data Analysis, Interface Prototyping and Implementation

EDUCATION

Ph.D. Computer Science

Colorado School of Mines

Golden, CO | Expected May 2025

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

Colorado School of Mines

Golden, CO | Dec 2022

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

University of Tulsa

Tulsa, OK | May 2020

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 - Jul 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

St. Joseph County, IN | May 2019 - Jul 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

Corvallis, OR | May 2018 - Jul 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

Trefny Graduate Teaching Fellowship | Fellow

Present

Provided students in College Teaching Certificate Program feedback on their teaching portfolios items and course teaching based on observations. Work on a professional development project aimed at highlighting ethics discussion and broader thinking in all computer science courses.

Mines Graduate Student Government | Director of Media and Marketing

Present

Mentorship | Graduate Mentor

2021 - Present

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

Conferences & Journals | Paper Reviewer

Present

*ACM CHI Conference on Human Factors in Computing Systems - 2024
ACM Transactions on Human-Robot Interaction - 2022, 2024*

ACM/IEEE International Conference on Human-Robot Interaction - 2022, 2024
IEEE International Conference on Robot & Human Interactive Communication - 2023
International Journal of Social Robotics - 2022
ICSR Workshop HRI for Space Robotics - 2021

HRI Conference | Workshop Organizer Present
2024 HRI Robo-Identity 3 Workshop - Present
2023 HRI Pioneers Workshop, Web/Publicity Chair - May 2022 - Mar 2023

Summer Multicultural Engineering Training Program | Workshop Organizer Jun 2023
Organized and ran interactive robot design workshops for high students in the SUMMET program.

Society of Hispanic Professional Engineers | Outreach Organizer and Volunteer 2019-2023
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. Dia de Ciencias Presenter, gave a presentation on Human-Robot Interaction Research and robot demo to local Colorado students and their families - Apr 2023.
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 Aug 2023 - May 2024

Roboethics Competition at ICRA 2023 | 1st Place Winning Team Jul 2023
Submitted proposal on "NICE: An ethically-sensitive design framework for fetch robots in care contexts"

HRI Pioneers Workshop | Selected for 2022 Cohort Mar 2022

NSFGRFP | Honorable Mention Jan 2021

NSFGRFP | Honorable Mention Jan 2020

Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) | Scholar 2016 - 2020

RESEARCH PUBLICATIONS

- **No Name, No Voice, Less Trust: Robot Group Identity Performance, Entitativity, and Trust Distribution** | [Alexandra Bejarano](#), Tom Williams
2023 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 Williams
Workshop 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 Williams
2022 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 Williams
2022 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](#)

RESEARCH 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, Aug 2023.
Poster at the Rocky Mountain Celebration of Women in Computing, Sep 2022.
- **Interfaces and Architectural Mechanisms for Multi-Robot Control** | [Alexandra Bejarano](#), Tom Williams
Poster at the Distributed and Collaborative Intelligent Systems and Technology (DCIST) PI Meeting at the University of Pennsylvania, Jun 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, Mar 2023.
- **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, Mar 2022.
- **Understanding and Influencing User Mental Models of Robot Identity** | [Alexandra Bejarano](#), Tom Williams
Oral presentation at the HRI Pioneers Workshop, Mar 2022.
- **Perceived Robot Empathy within Social Robot Design for Hospitalized Children** | [Alexandra Bejarano](#), Olivia Lomax, Peyton Scherschel
Poster for Computing-Mines Affiliates Partnership Program, Colorado School of Mines, 2020.
- **WiFi Leaf Detection System** | [Alexandra Bejarano](#), Aaron Striegel
Poster at the Oklahoma Louis Stokes Alliance for Minority Participation (OK-LSAMP) Research Symposium, 2019.
Poster at the Summer Undergraduate Research Symposium (SURS), University of Notre Dame, 2019.
- **Counterfactuals in a Multiagent Domain** | [Alexandra Bejarano](#), Connor Yates, Golden Rockefeller, Kagan Tumer
Oral presentation at the National Conference on Undergraduate Research, 2019.
Poster at the OK-LSAMP Research Symposium, 2018.
- **Robot Design for Human Interaction** | [Alexandra Bejarano](#)
Oral presentation at the National Conference on Undergraduate Research, Edmond, Oklahoma 2018.
Oral presentation at the OK-LSAMP Research Symposium, 2017.