

Andrea Cuadra

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Education

[†] *Indicates expected*

2022–2024[†] Postdoctoral Scholar, Computer Science (Human-Computer Interaction),
Stanford University

Supervisor: James Landay

2018–2022 Ph.D., Information Science, Cornell University

Advisors: Deborah Estrin (chair), Nicola Dell (co-chair), Malte Jung (minor member), Amon Millner (external member)

Dissertation title - Inclusive Interaction Design of Voice Assistants for Older Adults

2018–2020 M.Sc., Information Science, Cornell University

2015–2017 M.Sc., Engineering: Product Design, Stanford University

Advisors: Bill Burnett and David Kelley

Design Garage Project - *Increasing Child-Parent Quality Time*: identified specific user needs, and designed solutions as part of this year-long design project. Our final deliverable was a published children's book.

2009–2013 B.Sc., Engineering: Interaction Design, Olin College of Engineering

Advisor: Amon Millner

Senior Capstone Project - *Enhancing the Autodesk 123D Experience for Secondary School Students*: delivered bite-size pieces of curriculum to introduce 3D modeling software in various academic settings.

Grand Challenge Scholar Project - *Summer Camp: Motivating Students for Advanced Personalized Learning*: founded a sustainability summer camp for 8–12 year-old kids based on hands-on engineering projects and experiments.

Internships

2019	Google, Search User Experience Research Intern	Mountain View, CA
2018	Google, Chrome User Experience Research Intern	San Francisco, CA
2016	Yahoo, Flurry User Experience Research Intern	Sunnyvale, CA
2012	Hopper, User Experience Research and Design Intern	Cambridge, MA
2012	Hopper, Product Management Intern	Boston, MA

Work Experience

2021–2021	Senior Associate Summer User Experience Researcher, Sidewalk Labs
2013–2017	Entrepreneur Toy and Game Inventor, Crazy Machine
2017–2017	Research Contractor at REDlab, Stanford Graduate School of Education
2017–2017	Summer Instructor, Stanford Pre-Collegiate Studies
2014–2015	Remote Technical Support, Modkit
2013–2014	User Experience Researcher and Designer, Hopper

Teaching Assistant

2018	INFO 5345, Developing and Designing Interactive Devices	Cornell Tech
2018	INFO 5345, Developing and Designing Interactive Devices	Cornell Tech
2017	From Ideas to Action	IDEO U
2017	Leading for Creativity	IDEO U
2017	Executive Education, Design Thinking for Customer Experience	INCAE
2017	ENGR 280, From Play to Innovation	Stanford University
2017	ME 120, History and Philosophy of Design	Stanford University
2017	ME 216B, Advanced Product Design: Implementation 1	Stanford University
2017	ME 110B, Digital Design Principles and Applications	Stanford University
2017	ME 110, Design Sketching	Stanford University
2016	ME 110B, Digital Design Principles and Applications	Stanford University
2016	ME 110, Design Sketching	Stanford University
2016	ME 115A, Introduction to Human Values in Design	Stanford University
2016	ME 101, Visual Thinking	Stanford University
2012	ENGR 2599A, Computing and Craft	Olin College

Volunteer service

2021	Maker Lab, teaching volunteer (since 2018)	Cornell Tech
2020	Graduate Students for Gender Inclusion in Computing, advocate	Cornell University
2019	PhD Admissions Committee, Cornell Tech representative	Cornell University
2019	Alumna interviewer	Olin College

Invited Talks

2022	La Salle University of Technology (ULSA), <i>Designing Voice Assistants Inclusively</i> .	León, Nicaragua
2021	Memorial Sloan Kettering, <i>Using Artificial Intelligence to Improve Healthcare Inclusion</i>	New York, NY
2014	TEDx, <i>Don't Shut Down Your Creativity</i>	Managua, Nicaragua
2014	Universidad Autónoma del Occidente, <i>The Fabrication Behind My Inventions</i>	Cali, Colombia
2014	IEEE 33rd Central American and Panama Student Conference, <i>Entrepreneurship in Digital Fabrication</i>	Managua, Nicaragua

Selected Honors and Awards

2019	Digital Life Initiative Doctoral Fellow
2013	National Academy of Engineering Grand Challenge Scholar
2009	Olin College four-year, full-tuition merit scholarship

Hackathons

2016	Yahoo internal, 1st Place
2015	NASA SpaceApps Challenge, 1st Place and People's Choice Award
2014	Hasbro-A-Thon, 1st Place
2013	Hasbro-A-Thon, 2nd Place
2013	MIT Education Design-A-Thon, 2nd Place

Publications

Conference Papers (peer reviewed)

- [1] **Cuadra, A.**; Baek, H.; Estrin, D.; Jung, M.; & Dell, N. (June 2022). *On Inclusion: Video Analysis of Older Adult Interactions with a Multi-Modal Voice Assistant in a Public Setting*. International Conference on Information and Communication Technologies and Development (ICTD).
- [2] **Cuadra, A.**; Li, S.; Lee, H.; Cho, J.; & Ju, W. (April 2021). *My Bad! Repairing Intelligent Voice Assistant Errors Improves Interaction*. Proc. ACM Hum.-Comput. Interact. 5, CSCW1, Article 27, 24 pages. <https://doi.org/10.1145/3449101>
- [3] **Cuadra, A.**; Bankole, O.; & Sobolev, M. (June 2021). *Planning Habit: Daily Planning Prompts with Alexa*. In: Ali R., Lugrin B., Charles F. (eds) Persuasive Technology. PERSUASIVE 2021. Lecture Notes in Computer Science, vol 12684. Springer, Cham. https://doi.org/10.1007/978-3-030-79460-6_7

Journals (peer reviewed)

- [1] **Cuadra, A.**; Tin, A.; Moffat, G.; Alexander, K.; Downey, R.; Korc-Grodzicki, B.; Vickers, A.; & Shahrokni, A. (In submission). *The Association Between Perioperative Frailty and Ability to Complete a Web-Based Geriatric Assessment Among Older Adults with Cancer*.
- [2] **Cuadra, A.**; Chen, Y.; Cho, K.; Estrin, E.; & Shahrokni, A. (2022). *Introducing the v-RFA, a voice assistant-based geriatric assessment*. Journal of Geriatric Oncology (Research Letter).
- [3] Li, J.; **Cuadra, A.**; Mok, B.; Kim, J.; Reeves, B.; Kaye, J.; & Ju, W. (2019). *Communicating dominance in a nonanthropomorphic robot using locomotion*. Transactions on Human-Robot Interaction (THRI), 8(1), 4. <https://doi.org/10.1145/3310357>

Posters and Abstracts

- [1] **Cuadra, A.**; Tin, A.; Shahrokni, A. (2022). The association between perioperative frailty and ability to complete a web-based geriatric assessment in older adults with cancer. J Clin Oncol 40. (Suppl; abstr e24022).
- [2] **Cuadra, A.**; Goedicke, D.; Zamfirescu-Pereira, J.D. (2021). *Democratizing Design and Fabrication Using Speech: Exploring co-design with a voice assistant*. In CUI 2021 - 3rd Conference on Conversational User Interfaces (CUI '21), July 27–29, 2021, Bilbao (online), Spain. ACM, New York, NY, USA, 8 pages. <https://doi.org/10.1145/3469595.3469624>
- [3] Friedman, N.; **Cuadra, A.**; Patel R.; Azenkot S.; Stein J.; & Ju, W. (2019). *Voice Assistant Strategies and Opportunities for People with Tetraplegia*. In The 21st International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '19). ACM, New York, NY, USA, 575–577. <https://doi.org/10.1145/3308561.3354605>