LEYA BREANNA BALTAXE-ADMONY

Human Centered Design Researcher

@ bre@ucsc.edu +1 818-571-7237 leyabreanna.com
in linkedin.com/in/baltaxe

EDUCATION

🎓 Ph.D in Computational Media, Human Computer Interaction
University of California Santa Cruz — Fall 2018 – Present → Expected Summer 2023

🎓 B.S. in Computer Engineering, Robotics and Controls
University of California Santa Cruz — Fall 2014 – Spring 2018

PROFESSIONAL EXPERIENCE

Technical Lead
NSF I-Corps — Summer 2022

Graduate Student Researcher
Misfit & ASSIST Labs — Fall 2018 - Present

Research and Design Consultant
World Access for the Blind — Fall 2021 - Present

Research Intern
Microsoft Research, Ability Team and Soundscape — Summer 2021

Computational Media Graduate Community Manager
Baskin School of Engineering, University of California Santa Cruz — Fall 2018 - Winter 2021

Voice Assistant Software Engineering Intern
Plantronics — Summer 2018

Undergraduate Researcher
Mircea Teodorescu Lab & ASSIST Lab — Spring 2015 - Spring 2018

Visiting Technologist
National Institute of Advanced Industrial Science & Tokyo Institute of Technology — Summer 2017

Test Engineer Intern
NASA Ames Research Center — Summer 2016

Engineering Intern
Bearaxe Engineering — Summer 2015

PUBLICATIONS

Full Conference Papers (Peer-Reviewed)

1. **Leya Breanna Baltaxe-Admony**, Lee Taber, and Kevin Weatherwax. A livestream work companion. *interactions*, 26(2):38–42, 2019
2. Hansen Brian, **Leya Breanna Baltaxe-Admony**, Sri Kurniawan, and Angus Forbes. Exploring sonic parameter mapping for network data structures. In *International Conference on Auditory Display 2019*. Georgia Institute of Technology, 2019
3. **Leya Breanna Baltaxe-Admony**, Tom Hope, Kentaro Watanabe, Mircea Teodorescu, Sri Kurniawan, and Takuichi Nishimura. Exploring the creation of useful interfaces for music therapists. In *Audio Mostly 2018*. Association for Computing Machinery, 2018
4. Steven Lessard, Pattawong Pansodtee, Ash Robbins, **Leya Breanna Baltaxe-Admony**, James M Trombadore, Mircea Teodorescu, Adrian Agogino, and Sri Kurniawan. Crux: A compliant robotic upper-extremity exosuit for lightweight, portable, multi-joint muscular augmentation. In *Rehabilitation Robotics (ICORR), 2017 International Conference on*, pages 1633–1638. IEEE, 2017
5. **Leya Breanna Baltaxe-Admony**, Ash S Robbins, Erik A Jung, Steven Lessard, Mircea Teodorescu, Vytas SunSpiral, and Adrian Agogino. Simulating the human shoulder through active tensegrity structures. In *ASME 2016 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference*, pages V006T09A027–V006T09A027. American Society of Mechanical Engineers, 2016

6. Steven Lessard, Dennis Castro, William Asper, Shaurya Deep Chopra, **Leya Breanna Baltaxe-Admony**, Mircea Teodorescu, Vytas SunSpiral, and Adrian Agogino. A bio-inspired tensegrity manipulator with multi-dof, structurally compliant joints. *arXiv preprint arXiv:1604.08667*, 2016

Posters and Workshop Papers (Lightly Peer-Reviewed)

1. **Leya Breanna Baltaxe-Admony**, Tessa Eagle, and Kathryn Ringland. Creating a lab with a culture of care. In *Workshop: Dreaming Disability Justice in HCI In CHI '22*. Association for Computing Machinery, 2022
2. Jared Duval, **Leya Breanna Baltaxe-Admony**, Sri Kurniawan, and Kathryn Ringland. Dreem: An emerging method for building a meaningful disability-related research agenda. In *Workshop: Dreaming Disability Justice in HCI In CHI '22*. Association for Computing Machinery, 2022
3. **Leya Breanna Baltaxe-Admony**, Jared Duval, Sri Kurniawan, and Kathryn Ringland. Using social media to build authentic empathy with special populations as a precursor to participatory work. In *Workshop: Social Media as a Design and Research Site in HCI: Mapping Out Opportunities and Envisioning Future Uses. In CHI '21*. Association for Computing Machinery, 2021
4. Kathryn Ringland and **Leya Breanna Baltaxe-Admony**. Carework and community on twitter. In *Workshop: Researcher Wellbeing and Best Practices in Emotionally Demanding Research In CHI '22*. Association for Computing Machinery, 2022
5. **Leya Breanna Baltaxe-Admony**, Lee Taber, and Kevin Weatherwax. A livestream companion. In *Workshop: All the World (Wide Web)'s a Stage: A Workshop on Live Streaming In CHI '19*. Association for Computing Machinery, 2019
6. Steven Lessard, **Leya Breanna Baltaxe-Admony**, Ash Robbins, Kevin Le, Mircea Teodorescu, and Sri Kurniawan. Observing motor impairment using the cave automatic virtual environment (cave) to guide soft exosuit design. In *Workshop on Wearable Devices and Assistive Robotics In IROS '16*. IEEE / RSJ, 2016

Organized Workshops (Lightly Peer-Reviewed)

1. *Games Research Talks*, Games Showcase, University of California Santa Cruz, 2019
2. *Computational Poetry Workshop*, Baskin School of Engineering, 2019
3. *Deformable Controllers Workshop: An introduction to Creating Soft Sensors for Controlling Media and Games*, Baskin School of Engineering, 2018

Invited Doctoral Consortia

1. **Leya Breanna Baltaxe-Admony**. Equity and justice based design practices for engaging people with disabilities. In *Conference on Designing interactive systems (DIS '22)*. Association for Computing Machinery, 2022
2. **Leya Breanna Baltaxe-Admony**. Pathways for persons with visual impairments to create ai systems. In *The 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '20)*. Association for Computing Machinery, 2020

TEACHING EXPERIENCE

Guest Lectures

1. Working with (and being) Humans: Unexpected moments in HCI Research, *Introduction to Design Methods in Human Computer Interaction*, University of California Santa Cruz, 2022

Teaching Assistantships

User Experience for Interactive Media
Computational Media Department, UCSC — Spring 2022

Accessible Web Development
Ability Project, New York University — Summer 2020

Algorithmic Music for Games[1]
Computational Media Department, UCSC — Spring 2019

Other Teaching

Creating Digital Audio - Grader
Computational Media Department, UCSC — Winter 2021

[1] Responsible for preparing and giving 1 hour lectures to 70+ students once per week throughout the quarter

Research Mentor for High School Students
Science Internship Program — Summer 2019

Youth Climbing Instructor
Pacific Edge Climbing Gym — Spring 2018 - Winter 2020

Girls Coding Instructor
Plantronics — Summer 2018

Laboratory Instructor - Various Courses
Computer Science and Engineering Department, UCSC — Spring 2015 - Winter 2018
Courses:
- ⋆ Assembly Language and Systems Design
- ⋆ Discrete Mathematics
- ⋆ Data Structures and Algorithms

HONORS AND COMMENDATIONS

- ⋆ UCSF-Stanford Pediatric Device Consortium Awardee
- ⋆ Microsoft AI For Accessibility Grant Awardee
- ⋆ University of California Campus Fellow
- ⋆ CITRIS Tech for Social Good Grant Awardee
- ⋆ SWE Graduate Women Vice Chair
- ⋆ Future Generation of Jazz Scholarship
- ⋆ UCSC Achievement in Undergraduate Research Award
- ⋆ Grace Hopper Scholar
- ⋆ UCSC Mechatronics Competition Winner
- ⋆ Women in Engineering, International Leadership Conference Scholarship
- ⋆ Merit Scholarship for Academic Excellence
- ⋆ UCSC Honor Program
- ⋆ UCSC IEEE Branch President
- ⋆ Dean's List
- ⋆ Ginger Jolley Art Scholarship

SKILLS

As a whole, I strive to empower communities throughout the design process and employ various human centered design practices to do so.

Design: Rapid Prototyping | User Testing | 3D Modeling | Data Analysis | Interview and Survey Design | Participatory Design | Voice User Interface Design | Systems Design

Programming: Python | C/C++ | JavaScript | Keras / Tensorflow | Vue.js | Matlab | Unix | Web Development | Cloud Infrastructure

HOBBIES

Trombone | Climbing | Surfing | Backpacking | Mountain Biking | Cooking | Board Games | Knitting | Pottery