

# Casey Hunt

Portfolio : <https://caseyhunt.github.io>

Publications: <https://scholar.google.com/citations?hl=en&user=c5HtxVMAAAAJ>

Creative Technologies and Design, PhD Candidate

ACME Lab, ATLAS Institute, University of Colorado Boulder

## Education

Aug 2021 - Present

**University of Colorado Boulder, ATLAS Institute**

PhD Student, Creative Technologies and Design

Planned Graduation Date: December 2025

Aug 2019 - May 2021

**University of Colorado Boulder, ATLAS Institute**

M.Sc., Creative Technologies and Design

Aug 2011 - May 2015

**University of Utah**

B.Sc., Chemistry with Biological Emphasis

## Research

### Together Apart

*PhD Research Assistant*

May 2021 - Present

ATLAS Institute - CU Boulder | University of Washington - Information School | Pratt Institute

### Co-Designing Sensory Extensions for Inclusive Educational Simulations

*PhD Research Assistant*

May - Aug 2022

Craft Technology Lab - ATLAS Institute | PhET Interactive Simulations - CU Boulder

NSF Research on Emerging Technologies for Teaching and Learning (RETTL)

### University of Colorado Boulder, ATLAS Institute

ACME Lab, Advised by Ellen Do

*PhD Student Researcher*

Jan 2024 - Present

THING Lab, Advised by Daniel Leithinger

*PhD Student Researcher*

Aug 2021 - Jan 2024

*Master's Student Researcher*

Jan 2020 - May 2021

## Industry

### Boulder Food Rescue

*Research Assistant Intern*

Jan - May 2021

Grant for the Web: Web Monetization Opportunities within Open-Source Non-Profits

- Collaborated with leadership to explore micro-transaction models for compensating open-source developers for contributions to a food donation tracking software.
- Wrote a white paper summarizing research findings and new feature proposals, submitted to the Mozilla Grant for the Web
- Conducted user research on compensation models and deployment challenges, gathering insights from interviews with open-source developers and end-users (US food banks).

## **Apsis Healthcare**

*UX Developer*

Feb 2018 - Mar 2020

- Designed wireframes in Figma for screen based user interfaces for custom biotech manufacturing hardware and a Health Management Information System (HMIS) prototype.
- Led UX research by interviewing healthcare professionals and bioscientists to gather insights for HMIS and manufacturing hardware user interfaces.
- Partnered with back-end developers to strategize and prioritize feature development, ensuring alignment with user needs, funding timelines, and technical constraints.
- Developed functional HMIS prototypes using front-end technologies, including HTML, CSS, and JavaScript, to validate design concepts.

## **Zavvie**

*UX Design Intern*

Aug 2019 - Jan 2020

- Collaborated with the web development team and Chief Marketing Officer (CMO) to design and deliver user-friendly products for enterprise real estate clients.
- Created printed marketing materials using Adobe InDesign and Adobe Photoshop, working closely with the Chief Technology Officer (CTO), CEO, and CMO to develop designs that enhanced branding and supported business objectives.
- Customized client-facing interfaces for B2B clients—implementing branded styling using CSS, WordPress, and Adobe Photoshop. Ensured all products aligned with client branding guidelines.
- Participated in Agile workflows, including Scrum and Kanban methodologies, to track project progress, align team efforts, and ensure on-time delivery of customized solutions.

## **NextCure**

*Quality System Associate*

Aug 2017 - Jul 2019

- Managed maintenance, testing, and expansion of company Manufacturing Execution System (MES), collaborating with the MES startup to prioritize features and negotiate development timelines.
- Conducted user research by interviewing biological scientists, proposing and designing new MES features using Figma to address user needs.
- Supported FDA compliance by generating periodic data reports, conducting quality assessments, and ensuring alignment with regulatory standards.
- Reviewed drug manufacturing batch records and GMP (Good Manufacturing Practices) testing to approve product release.
- Performed environmental monitoring in a cleanroom environment, including air particulate sampling and water quality testing, to maintain manufacturing standards.

# Publications

## **Making a Metaphor Sandwich: Analyzing Children's use of Metaphor During Tabletop Telepresence Robot Supported Participatory Design**

**Casey Lee Hunt**, Kaiwen Sun, Zahra Dhuliawala, Fumi Tsukiyama, Iva Matkovic, Zachary Schwemler, Anastasia Wolf, Zihao Zhang, Allison Druin, Amanda Huynh, Daniel Leithinger, and Jason Yip. (IDC '24)

## **Designing Together, Miles Apart: A Longitudinal Tabletop Telepresence Adventure in Online Co-Design with Children.**

**Casey Lee Hunt**, Kaiwen Sun, Zahra Dhuliawala, Fumi Tsukiyama, Iva Matkovic, Zachary Schwemler, Anastasia Wolf, Zihao Zhang, Dr Allison Druin, Amanda Huynh, Daniel Leithinger, Jason Yip. (IDC '23)

## **TactorBots: A Haptic Design Toolkit for Out-of-lab Exploration of Emotional Robotic Touch.**

Ran Zhou, Zachary Schwemler, Akshay Baweja, Harpreet Saree, **Casey Lee Hunt**, Daniel Leithinger. 2023. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23). Association for Computing Machinery, New York, NY, USA.

## **Investigating Sensory Extensions as Input for Interactive Simulations.**

Chris Hill<sup>1</sup>, **Casey Lee Hunt**<sup>1</sup>, Sammie Crowder, Brett Fiedler, Emily B. Moore, and Ann Eisenberg. 2023. In Proceedings of the Seventeenth International Conference on Tangible, Embedded, and Embodied Interaction (TEI '23). Association for Computing Machinery, New York, NY, USA, Article 39, 1–7. <https://doi.org/10.1145/3569009.3573108>

# Teaching

## **University of Colorado Boulder, ATLAS Institute**

*Associate Lecturer*

*Web*

ATLS 2200

Fall 2021, Fall 2024

Lecture course introducing the basics of the design, development, and administration of websites. Topics covered include HTML, CSS, Vanilla JS, Web Hosting, Web Accessibility Standards (WCAG), and Figma. I redeveloped the curriculum for this course with the guidance of senior teaching faculty in order to address the changing goals of the institute in Fall 2021.

*Teaching Assistant*

*Meaning of Information Technology*

Fall 2023

ATLS 2000

Introductory class for early undergraduates (~100 students), focused on teaching students critical reflection for technology design through the lens of socio-technical theory. My responsibilities included grading students' research projects, advising student research, and supporting lecture preparation.

*Teaching Assistant*

*Computational Foundations 2*

Spring 2023

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<sup>1</sup> Co-First Authors

## *ATLS 2270*

Lab based course teaching the fundamentals of data structures (lists, stacks, queues, trees) and algorithms (sorting, graph traversal). I taught 3 labs, supporting students in building an understanding of the material through homework help and lecture review.

## *Associate Lecturer*

### *Process*

#### *ATLS 2002*

Spring 2020

Introduction to design theory, UX design and wireframing (Figma), and graphic design (Adobe Illustrator and Adobe Photoshop) for students of the ATLAS certificate program. I adapted and delivered this course based on past curricula to support the diverse interests of attending ATLAS certificate students (~40 students), representing diverse majors from across CU Boulder including film studies, business, and computer science.

## **CU Pre-College Outreach and Engagement**

### *Lecturer*

#### *College Algebra*

Summer 2024

Developed curriculum and delivered this two week course covering topics in college level algebra for high school students.

#### *Statistics*

Summer 2024

Developed curriculum and delivered this two week course covering topics in college level statistics for high school students.

#### *Stem Projects*

Summer 2023

Developed curriculum and delivered a project based learning environment (1 week) for STEM concepts for Colorado high school students. Covered topics like measurement and uncertainty, introductory data analysis techniques (e.g. significance tests, standard deviation, and mean), and experimental design.

## **CU Science Discovery**

### *Instructor*

#### *Digital Art and Media*

Summer 2021

Taught web based digital art techniques (PhotoPea, P5.js, and Figma) for high school students.

#### *Girls Who Code Wearables*

Summer 2021

Instructed 7-12 year old girls and non-binary students about crafting wearable technology using Micro:Bit, conductive tape/thread, and a variety of sensors and inputs. Followed the PBS Girls Who Code curriculum.

### *Engineering in the Maker Age*

Summer 2021 (In Person), Summer 2020 (Remote)

Co-taught and developed this engineering camp for high school students. Introduced mechanics principles, 3D-Printing, and electrical engineering concepts through project-based learning.

### *Minecraft Adventures*

Summer 2021 (In Person), Summer 2020 (Remote)

Introduced late elementary/early middle school students to coding concepts such as loops, variables, and functions via drag and drop Minecraft mod building lessons.

## **Hackaday.io**

### *Instructor*

#### *Art + Code*

Aug - Oct 2020

Developed and delivered P5.js procedural art course. Topics included the basics of color theory and digital composition as well as procedural art techniques such as recursion, interactivity, and animation. Currently over 2k views on Youtube.

## **Service**

### **CU Science Discovery**

#### *Research Mentor*

Summer 2022, Summer 2023

Mentored two high school students in an immersive STEM research experience. Each summer, we spent 6 weeks building tangible interfaces and then demonstrated them at a showcase at the end of the program. In summer 1, I helped students build a scissor-lift based shape display. In summer 2, students used Sony Toio robots to build a smart tabletop that enabled telepresence, tangible tic-tac-toe games. Topics covered included circuit design, soldering, P5.js, and Arduino programming.

### **Kith Colorado**

#### *Technology & Digital Marketing Director* Oct 2015 - Dec 2020

Leader of organizational identity including social media, web presence, and promotion for a small, Denver area 501c3 non-profit organization that provided low cost visits with a licensed IBLCE.

## **Awards**

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|------------------|--|
| 2024             | <b>3-Minute Thesis Finalist, CU Boulder</b>  |
| 2024             | <b>Outstanding Mentor DLA Program (Undergraduate Research)\</b>                      |
| 2022, 2023, 2024 | <b>ARCS Scholar Award for Outstanding Women in STEM</b>                              |
| 2022             | <b>Engineering Excellence Fund Award, CU Boulder Student Projects</b>                |
| 2021             | <b>World Haptics Conference Student Innovation Challenge<br/>(Honorable Mention)</b> |
| 2020             | <b>Best Educational Software, T9 Hacks</b>   |