

Education

2020–Present

Human-Computer Interaction PhD, Carnegie Mellon University, Pittsburgh, PA

- **Advisors:** Motahhare Eslami, Ken Holstein
- **Graduate Research Assistant Work:** examining and implementing ways to reduce harm by shifting power to those who use and are most affected by technology, especially in the context of algorithmic systems
- **Graduate Coursework:** Fairness, Accountability, Transparency, and Ethics (FATE) in sociotechnical systems; Justice, Equity, Diversity, and Inclusion in HCI; Social Perspectives in HCI; Computer Science Perspectives in HCI; Transformational Game Design

2014–2018

Computer Science BA, Brown University, Providence, RI

- **Writing & Usage coursework:** Creative Nonfiction, Journalistic Writing, Playwriting, Multimedia Nonfiction, Digital Nonfiction, Fiction I & II, Writing Diversity, Independent Study: Style Guides, Linguistic Discrimination
- **Mathematics coursework:** Multivariable Calculus, A Taste of the Infinite, Differential Equations, Statistical Inference, Linear Algebra, Discrete Structures & Probability, Theory of Computation, Introduction to Number Theory, Functional Programming, Object-Oriented Programming, Software Engineering
- **Design coursework:** Visual Arts Studio Foundation, UI/UX Design, Modern Architecture, Designing Humanity-Centered Robots, iPhone Moviemaking, Typography (at RISD), Human-Computer Interaction Seminar

Academic Publications

P2

Alicia DeVos, Aditi Dhabalia, Hong Shen, Kenneth Holstein, Motahhare Eslami. *[On user-driven algorithm auditing]*. (In submission '22).

P1

Hong Shen*, **Alicia DeVos***, Motahhare Eslami, Kenneth Holstein. *Everyday Algorithm Auditing: Understanding the power of everyday users in surfacing harmful algorithmic behaviors*. Proceedings of the ACM on Human-Computer Interaction. (CSCW2), 2021.

* indicates co-first authorship: these authors contributed equally to the work

Industry Experience

2019–2020

Growth Product Manager, Noom, New York, NY

- Owned experimentation on the sign-up survey flow at noom.com, leading 58 A/B or multivariate tests from idea to design to development to launch to analysis
- Thoroughly tested plan length and pricing to understand the impact on purchase conversion and retention rates
- Wrote detailed design documents, collaborated with engineering, and conducted a rigorous quality assurance process to create custom experiments
- Ensured users pursued healthy weight loss goals by adding additional validation and messaging to the height and weight section of the sign-up survey flow as well as adding a step to filter out pregnant users

2018–2019

Optimization Associate, Dow Jones, New York, NY

- Led product optimization efforts for The Wall Street Journal and Barron's: strategized, ran, and analyzed A/B and multivariate tests on wsj.com and barrons.com
- Created stronger ties between optimization team and newsroom through acting as team editorial liaison
- Provided editorial, content, and design feedback and suggestions for improvement for blog posts, presentation decks, brand campaign websites, and digital tests
- Developed process for intern hiring and wrote straightforward documentation for future hiring
- Analyzed internal data lake to better understand past experimentation results and inform future experiments

2017–2018

Digital Media Coordinator, Brown University Curricular Resource Center for Peer Advising, Providence, RI

- Wrote and designed the office's first style guide to redefine and unify branding and ensure clear and consistent communication (see projects)

- Created, edited, and sent out weekly e-newsletter to 2,200+ people to communicate the CRC's events and increase awareness of the office
- Designed posters and other promotional materials for CRC events
- Held 8–10 open hours each week for drop-in advising

Summer 2018

Communications Intern, City of Johnson City, Johnson City, TN

- Edited, copyedited, and provided design suggestions for new city website content, including alterations to increase accessibility through ADA compliance
- Drafted first communications team style guide and wrote press releases

Summer 2017

Optimization Intern, Dow Jones, New York, NY

- Created, developed, and launched A/B and multivariate tests on WSJ Android and Barron's iOS apps (for example, a test I designed resulted in a 37% order increase)
- Saved optimization team 40+ hours of instruction time per new hire by writing a comprehensive onboarding guide
- Won the intern group competition (my role included designing, creating, and demoing the concept website)
- Analyzed competitors for insights by creating flow diagrams of app first-run experiences and push notification prompt and soft prompt schemes

Summer 2016

Information Security Intern, Akamai Technologies, Cambridge, MA

- Pinpointed sources of confusion in the security review portion of the the internal product development process through interviewing 20+ people with varying levels of interaction and satisfaction with the process
- Streamlined the security architecture review by cutting extraneous steps and writing a clear and comprehensive review process guide intended for product teams

Projects

2020–present

Collective Audit for Algorithmic Bias: Algorithmic bias finding practices, Carnegie Mellon University

Investigating how people individually and collectively find potentially harmful bias in algorithmic systems

2020

Healthy Weight Loss Goal Determination, Noom

A series of tests on how to best encourage users to pursue healthy weight loss goals

2019–2020

Experiments on Buyflow Survey Structure and Design, Noom

A series of tests on the sign-up survey flow's structure and design

2019–2020

The Impact of Plan Price and Length on Purchase Conversion and Retention Rates, Noom

A series of tests around pricing strategy

2018–2019

The Effects of a Secondary Content Module on Article Pages, Barron's at Dow Jones

A series of multivariate tests on a module on article pages containing links to other articles

2018–2019

One More Article, The Wall Street Journal and Barron's at Dow Jones

An exploration of ways to increase content consumed

2018

Curricular Resource Center Brand and Style Guide, Brown University

Brand and style guide for the Curricular Resource Center for Peer Advising (layout, branding, writing, design)

2018

Surrounded by Sea: Block Island Stories, Brown University

Audio family histories and memories of generations of Block Island residents (audio editing, website design)

2017

Personal Style Guide, Brown University

Grammar and style guide of personal preferences (layout, writing, design)

2016–2018

Brown Bites: Free Food at Brown, Brown University

Free food calendar with 1800+ followers (creation, curation, daily publication)

2016

Student Body, Brown University

Audio stories focusing on students with seemingly contradictory backgrounds (interviewing, audio editing)

Honors & Awards

- 2020 **Career Panelist, Brown University Department of Computer Science Industry Partners Program**, Remote
Spoke on early career trajectory and relevant preparation in college
- 2019 **Spotlight Presenter, Dow Jones**, New York, NY
Spoke on the optimization team's A/B and multivariate testing process and findings on the membership lifecycle (an opportunity typically only given to managers and other senior leaders)
- 2018 **Roundtable Presenter, Theories in Action Research Showcase**, Providence, RI
Spoke on the importance of inclusivity and author transparency in grammar and style guides
- 2018 **3rd Place Prizewinner, The John Russell Bartlett Society's Stillwell Prize**, Providence, RI
Presented book collection exploring writing and grammar style and usage over time and across media and source
- 2017 **Intern Group Project Competition Winner, Dow Jones**, New York, NY
Designed and branded WSJ concept website aimed at driving student activations
- 2016 **Finalist and Prizewinner, Library Innovation Prize**, Providence, RI
Developed an interactive scavenger hunt puzzle game using the Brown University Library's space and collections
- 2014 **4th Place Prizewinner, Hartshorn-Hypatia Mathematics Prize Examination**, Providence, RI
- 2014 **Finalist and Scholarship Winner, National Merit Scholarship Program**
- 2013, 2014 **Moody's Mega Math Challenge Triage Survivors, Moody's Foundation and SIAM**

Teaching & Advising

- 2021 **Guest Speaker, Computer Science Class, Stevenson School**, Remote
- 2020–Present **Mentor, Carnegie Mellon University AI Mentoring Program**, Pittsburgh, PA
- 2018 **Guest Speaker – In-Depth Reporting, East Tennessee State University**, Johnson City, TN
- 2016 **Teaching Assistant – UI/UX Course, Brown University Computer Science Department**, Providence, RI
- 2016–2017 **First-Year Advisor, Meiklejohn Peer Advising Program**, Providence, RI
- 2016 **Tutor – Swearer Tutoring and Enrichment in Math and Sciences, The Swearer Center**, Providence, RI
- 2015 **Classroom Assistant, Vartan Gregorian Elementary School**, Providence, RI
- 2015 **Residential Counselor – Summer Studies, Duke Talent Identification Program**, Durham, NC
- 2009–2013 **Camp Counselor – Summers Past History, Tipton-Haynes Historic Site**, Johnson City, TN

Activities

- 2021 **Student Representative, Carnegie Mellon HCII Faculty Meeting**, Pittsburgh, PA
- 2021 **Student Volunteer, Carnegie Mellon HCII Application Assistance Program**, Remote
- 2021 **Paper Reviewer, 2022 CHI Conference**, Remote
- 2021 **Panelist & Student Volunteer, Carnegie Mellon HCII Preview Event**, Remote
- 2021 **Student Volunteer, 2021 CHI Conference**, Remote
- 2021 **Head Coach, Winchester-Thurston Middle School Track Team**, Pittsburgh, PA
- 2021 **Student Volunteer, 2021 FAccT Conference**, Remote

2021 **Student Admissions Reviewer, Carnegie Mellon HCII REU Summer Program, Remote**

2020 **Student Volunteer, Carnegie Mellon HCII Application Assistance Program, Remote**

2020 **Panelist & Student Volunteer, Building Anti-Racist Futures @ CMU HCII Virtual Recruitment Event, Remote**

2020 **Student Volunteer, 2020 CSCW Conference, Remote**

2018–2019 **Assistant Editor, Lifewriting Annual, Providence, RI**

2015–2018 **Post- Magazine Copy Chief, The Brown Daily Herald, Providence, RI**

2014–2018 **Copy Editor, VISIONS Magazine, Providence, RI**

2014–2017 **Division I Varsity Cross-Country and Track Runner, Brown University Athletics, Providence, RI**

2017 **Student Leadership Team Coordinator, Brown–RISD Catholic Community, Providence, RI**

2016–2017 **Student Representative, Brown Dining Services Menu Review Team, Providence, RI**

Interests

Grammar, Piano, Running, Boggle, Painting, Baking, Musicals, Typography

