Alicia DeVrio

adevos@cmu.edu
aliciadevos.com

Research Interests

FATE in AI Systems, shifting power to everyday users of algorithmic systems, reducing algorithmic harm, critical algorithm studies, linguistic discrimination

Education

Human-Computer Interaction PhD, Carnegie Mellon University, Pittsburgh, PA   2020–Present
Advisors: Motahhare Eslami, Ken Holstein

Computer Science AB, Brown University, Providence, RI   2014–2018
Completed significant additional writing coursework

Rhode Island School of Design, Providence, RI   2017
Studied typography through cross registration

Academic Publications

Refereed Conference & Journal Publications

C3   Wesley Hanwen Deng, Boyuan Guo, **Alicia DeVrio**, Hong Shen, Motahhare Eslami, Kenneth Holstein. *Understanding Practices, Challenges, and Opportunities for User-Driven Algorithm Auditing in Industry Practice*. Under review. Preprint: https://arxiv.org/abs/2210.03709
Last name changed from DeVos to DeVrio in 2022

C2   **Alicia DeVos**, Aditi Dhabalia, Hong Shen, Kenneth Holstein, Motahhare Eslami. *Toward User-Driven Algorithm Auditing: Investigating users' strategies for uncovering harmful algorithmic behavior*. Proceedings of the ACM CHI Conference on Human Factors in Computing Systems. (CHI), 2022.

C1   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

Poster Publications

P1   **Alicia DeVos**, Aditi Dhabalia, Hong Shen, Kenneth Holstein, Motahhare Eslami. *Toward User-Driven Algorithm Auditing: Investigating users' strategies for uncovering harmful algorithmic behavior*. Duquesne University Tech Ethics Symposium. 2022.
Best Graduate Student Poster Award

Professional Experience

Growth Product Manager, Noom, New York, NY   2019–2020
Led experimentation efforts on the sign-up survey flow at noom.com

Optimization Associate, Dow Jones, New York, NY   2018–2019
Led product optimization efforts for wsj.com & barrons.com via A/B & multivariate testing

Digital Media Coordinator, Brown University Curricular Resource Center for Peer Advising, Providence, RI   2017–2018
Created weekly e-newsletter & new style guide, held 8–10 open hours weekly drop-in advising

Communications Intern, City of Johnson City, Johnson City, TN   Summer 2018
Provided design suggestions for new city website, drafted first team style guide, wrote press releases

Optimization Intern, Dow Jones, New York, NY   Summer 2017
Created, developed, and launched A/B and multivariate tests on WSJ Android and Barron's iOS apps
Intern Team Competition Winner

Information Security Intern, Akamai Technologies, Cambridge, MA   Summer 2016
Interviewed 20+ employees to pinpoint issues with product development process & create new guidelines

Honors & Awards

Best Graduate Student Poster Award, Duquesne University Tech Ethics Symposium, Pittsburgh, PA   2022
Poster presenting work on users' strategies for uncovering harmful algorithmic behavior

Spotlight Presenter, Dow Jones, New York, NY   2019
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)

3rd Place Prizewinner, The John Russell Bartlett Society's Stillwell Prize, Providence, RI   2018
Presented book collection exploring writing and grammar style and usage over time and across media and source

Intern Group Project Competition Winner, Dow Jones, New York, NY   2017
Designed and branded WSJ concept website aimed at driving student activations

Finalist and Prizewinner, Library Innovation Prize, Providence, RI   2016
Developed an interactive scavenger hunt puzzle game using the Brown University Library's space and collections

4th Place Prizewinner, Hartshorn-Hypatia Mathematics Prize Examination, Providence, RI   2014

Finalist and Scholarship Winner, National Merit Scholarship Program   2014

Moody's Mega Math Challenge Triage Survivors, Moody's Foundation and SIAM   2013, 2014

Teaching & Advising

Mentor, Brown University Women's Launch Pad, Remote   2022

Mentor, Carnegie Mellon University AI Mentoring Program, Pittsburgh, PA   2020–Present

UI/UX Course Teaching Assistant, Brown University Computer Science Department, Providence, RI   2016

First-Year Advisor, Brown University Meiklejohn Peer Advising Program, Providence, RI   2016–2017

Swearer Tutoring and Enrichment in Math and Sciences Tutor, The Swearer Center, Providence, RI   2016

Classroom Assistant, Vartan Gregorian Elementary School, Providence, RI   2015

Summer Studies Residential Counselor, Duke Talent Identification Program, Durham, NC   2015

Summers Past History Camp Counselor, Tipton-Haynes Historic Site, Johnson City, TN   2009–2013

Students Mentored
    Boyuan (Bill) Guo, undergraduate student   2021–2022
    Aditi Dhabalia, master's student   2020–2021
    Erica Chiang, undergraduate student   2020
    Justin Zhang, undergraduate student   2020

Invited Talks & Panels

Guest Speaker, Memphis Chapter of STEM4fem, Remote   2022

Guest Speaker, Computer Science Class, Stevenson School, Remote   2021

Career Panelist, Brown University Department of Computer Science Industry Partners Program, Remote   2020
Spoke on early career trajectory and relevant preparation in college

Roundtable Presenter, Theories in Action Research Showcase, Providence, RI   2018

Spoke on the importance of inclusivity and author transparency in grammar and style guides

Guest Speaker – In-Depth Reporting, East Tennessee State University, Johnson City, TN   2018

Service

Student Representative, Carnegie Mellon HCII Faculty Meeting, Pittsburgh, PA   2022, 2021

Student Volunteer, Carnegie Mellon Graduate Application Support Program, Remote   2022

Student Volunteer, Carnegie Mellon HCII Application Assistance Program, Remote   2021, 2020

Paper Reviewer for CHI Conference   2021–Present

Panelist & Student Volunteer, Carnegie Mellon HCII Preview Event, Remote   2021

Student Volunteer, CHI Conference   2022, 2021

Head Coach, Winchester-Thurston Middle School Track Team, Pittsburgh, PA   2021

Student Volunteer, FAccT Conference, Remote   2021

Student Admissions Reviewer, Carnegie Mellon HCII REU Summer Program, Remote   2022, 2021

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

Student Volunteer, CSCW Conference, Remote   2020

Interests

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