

ERIN WALK

Cambridge, MA
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RESEARCH INTERESTS

My research focuses on using large datasets, primarily social media data, to understand conflict, migration, and polarization. I am particularly interested in the ways in which online data can be used to support vulnerable, diverse, and hard to reach populations, as well as how such information can be combined with survey data and other traditional data sources. Methodologically, I am interested in probabilistic machine learning and natural language processing.

EDUCATION

Massachusetts Institute of Technology, Cambridge MA *Current*
Doctoral Student
Social and Engineering Systems
Advisor: Dr. Fotini Christia
Graduate Fellow at the MIT Global Diversity Lab

Harvard University, Cambridge MA *May 2017*
Bachelor's Degree, Mechanical Engineering
Minor in Government-International Relations

Bethesda-Chevy Chase High School, Bethesda MD *May 2013*
High School Diploma

PEER REVIEWED PAPERS

Displacement and Return in the Internet Era: Social Media for Monitoring Migration Decisions in Northern Syria with Fotini Christia and Kiran Garimella. Forthcoming in *World Development*.

Simplistic Collection and Labeling Practices Limit the Utility of Benchmark Datasets for Twitter Bot Detection with John Chris Hays, Zachary Schutzman, Philipp Zimmer, and Manish Raghavan. Accepted at The Web Conference (WWW) 2023.

WORKING PAPERS

Social Media Narratives across Platforms in Conflict: Evidence from Syria with Elizabeth Parker-Magyar, Ahmet Akbiyik, Kiran Garimella, and Fotini Christia.

Predicting individual mortality with traditional and machine learning methods with Luca Badolato, Ari Decter-Frain, Nicholas J. Irons, Maria Miranda, Elnura Zhalieva, Monica Alexander, Ugofilippo Basellini, and Emilio Zagheni.

Scholarly migration and collaboration worldwide: A word embedding representation with Aliakbar Akbaritabar.

PRESENTATIONS AND INVITED TALKS

APSA Special Projects Roundtable 'Learning How to Play with the Machines' Boston 2023
American Political Science Association Conference 2022
Text as Data Association Conference 2021, 2022
Midwest Political Science Association Conference 2021, 2022
MGHPCC SC22 MIT Virtual Booth 2022
Politics and Computational Social Science Conference 2021

16th Annual Households in Conflict Network (HiCN) Workshop on “Social Unrest and Violent Conflict in Times of Pandemics” 2020

ACADEMIC ACHIEVEMENTS AND FELLOWSHIPS

NSF Graduate Research Fellowship 2021

Michael Hammer Fellow 2019

MIT Summer Research Program Intern 2016

Phi Beta Kappa Senior 48, Cum Laude, John Harvard Scholar 2014 and 2015, Detur Book Prize 2014

AFCEA and Parsons undergraduate scholarships for excellence in engineering

ACADEMIC AND MENTORSHIP EXPERIENCE

Mather House Resident Tutor

Harvard University

Engage with students to create a welcoming house community. Act as an academic advisor for sophomores. Previously a Faculty Dean Aide 2019-2021.

Research Mentorship:

MIT Undergraduate Research Opportunities Program. Students Chris Noga and Ayesha Ali.

Teaching:

Math 1b: Calculus, Series and Differential Equations Course Assistant 2014-2015. Taught weekly problem solving sessions and staffed the Math Question Center. Harvard University.

Physics 15a: Introductory Mechanics and Relativity Grader 2017. Harvard University.

Math 21a: Multi-variable Calculus Tutor 2014. Harvard University.

PROFESSIONAL SERVICE

Committees

SES GAAP (Graduate Application Assistance Program) Program Organizer and Mentor, Current

IDSS Student Council President and Inaugural DE&I Officer, Current

IDSS Task force on Diversity, Equity, and Inclusion

IDSS REFS, Resources for Easing Friction and Stress

MIT Policy Hackathon Organizing Committee, Director of External Affairs 2020

Reviewing

International AAAI Conference on Web and Social Media (ICWSM) 2022, 2023

WORK EXPERIENCE

Cloudflare, Inc

2017 - 2019

Policy Analyst

Member of a four person global policy team. Researched current policy initiatives and their impact on cybersecurity and company practices. Spoke with lawmakers and experts to understand their viewpoints and further company interests. Organized, automated and ran day-to-day operations for corporate social responsibility projects.

SKILLS AND INTERESTS

ACE certified group fitness instructor teaching indoor cycle and total body conditioning classes at MIT and Harvard Recreation.

Group fitness instructor at [solidcore], 2019

Assistant Coach for Bethesda-Chevy Chase High School Novice Womens Rowing, Fall 2017

Letter Winner on the Radcliffe Varsity Lightweight Rowing Team, 2013-2017