KATY WEATHINGTON

Katy.weathington@colorado.edu

EDUCATION

PhD University of Colorado Boulder, Information Science — May 2025
Advisors: Dr. Brian Keegan & Dr. Jed Brubaker

MS Marquette University, Computing — May 2020
Specialization: Big Data & Data Analytics
Advisor: Dr. Shion Guha

BS Marquette University, Data Science & Mathematics — May 2019
Graduated with Honors, Cum Laude

HONORS AND AWARDS

NSF REU Fellow — 2018
Undergraduate research fellowship from the NSF
Funded by NSF Grant #1461264 (https://www.nsf.gov/awardsearch/showAward?AWD_ID=1461264)

RESEARCH EXPERIENCE

Marquette Computational Social Science Lab, Marquette University — 2017-2020
Researcher, Dr. Shion Guha

- Developed algorithmic crime mapping tools
- Quantitative and qualitative analysis of participant responses
- Found distance metric to be an impactful but often overlooked parameter
- Found defaults were rarely changed or considered
- Implies training for crime analysts needs to be more thorough and technical

Funded by NSF Grant #1850517 (https://www.nsf.gov/awardsearch/showAward?AWD_ID=1850517)

NSF REU Site, Marquette University — 2018
REU Fellow, Dr. Shion Guha

- Analysis of DBScan clustering algorithm
- Data geocoding
- Found that DBScan was poorly suited to cluster crime in cities

Funded by NSF Grant #1461264 (https://www.nsf.gov/awardsearch/showAward?AWD_ID=1461264)

PUBLICATIONS

Lightly Peer Reviewed

Katherine Weathington and Morgan Klaus Scheuerman, "Harm and Data Science: Framing Negative Human Outcomes as a Data Science Problem," *Interrogating Data Science Workshop at CSCW '20,* Oct. 2020

M. D. Romael Haque, **Katherine Weathington**, Joseph Chudzik and Shion Guha, "Understanding Law Enforcement and Common Peoples' Perspectives on Designing Explainable Crime Mapping Algorithms," *CSCW '20 Companion,* Oct. 2020.

M. D. Romael Haque, **Katherine Weathington** and Shion Guha, "Exploring the Impact of (Not) Changing Default Settings in Algorithmic Crime Mapping - A Case Study of Milwaukee, Wisconsin," *CSCW '19 Companion*, Nov. 2019.

TEACHING

Teaching Assistant for Computational Reasoning 1 — Spring 2021

Teaching Assistant for Computational Reasoning 2 — Fall 2020

MEDIA APPEARANCES

"Predictive policing algorithms are racist. They need to be dismantled." by Will Douglas Heaven, *MIT Technology Review*, July 17 2020.

PROFESSIONAL TRAINING

Spatial Data Analytics Workshop
Marquette University, Milwaukee, WI, January 10-12th 2018
Introduction to GIS software such as ArcGIS.

SKILLS

Programming: Python, R, JavaScript, Java

Platforms: PythonAnywhere, AWS

AFFILIATIONS

Association for Computing Machinery
SIGCHI

Upsilon Pi Epsilon Honor Society
Inducted member

SERVICE & LEADERSHIP POSITIONS

Marquette Gender & Sexuality Alliance, Vice President — 2018-2019

Marquette Gender & Sexuality Alliance, Treasurer 2017-2018