Building Infrastructure to Support Research and Development of (More) Trustworthy Information Systems

by Kate Starbird

CENTER FOR AN INFORMED PUBLIC

UNIVERSITY of WASHINGTON

Covid-19 “Infodemic”

Did China Steal Coronavirus From Canada And Weaponize It? | Zero Hedge

FAKE

Bioweapon

Did China Steal Coronavirus From Canada And Weaponize It

Last year a mysterious shipment was caught smuggling Coronavirus from Canada. It was traced to Chinese agents working at a Canadian lab. Subsequent ...

zerohedge.com

Btw take this with a grain of salt but this is from andrea's coworker: 2:49 PM

I hate to be alarmist but I would rather say something than not... I just heard from a friend whose partner is CIA. They're shutting everything down. We're going to get 48 hour notice today or tomorrow to get everything we need and then stay inside for a one month. Supposedly gov is sending everyone unemployment checks. This is getting bizarre.

Get groceries and st

Lockdown

Bill Gates's Masterplan

Rumoring and Crisis Events

- Rumors are common during crisis events — a natural byproduct of the “collective sensemaking” process
- People come together to make sense of complex and incomplete information space — to resolve anxiety and uncertainty
- Behavior during crisis events tends to be “pro-social”
- People tend to share rumors for altruistic reasons

Rumoring and COVID-19

- Covid-19 = lots of misinformation, in part due to persistent uncertainty
- Early on, most was primarily unintentional, people trying to figure things out
- Increasingly, we’re seeing more conspiracy theories (which result from a kind of corrupted sensemaking process), politicized misinformation, and disinformation

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Misinformation vs Disinformation

COVID-19 meets Election 2020

How Pervasive Mis- & Disinformation Threaten Democracy

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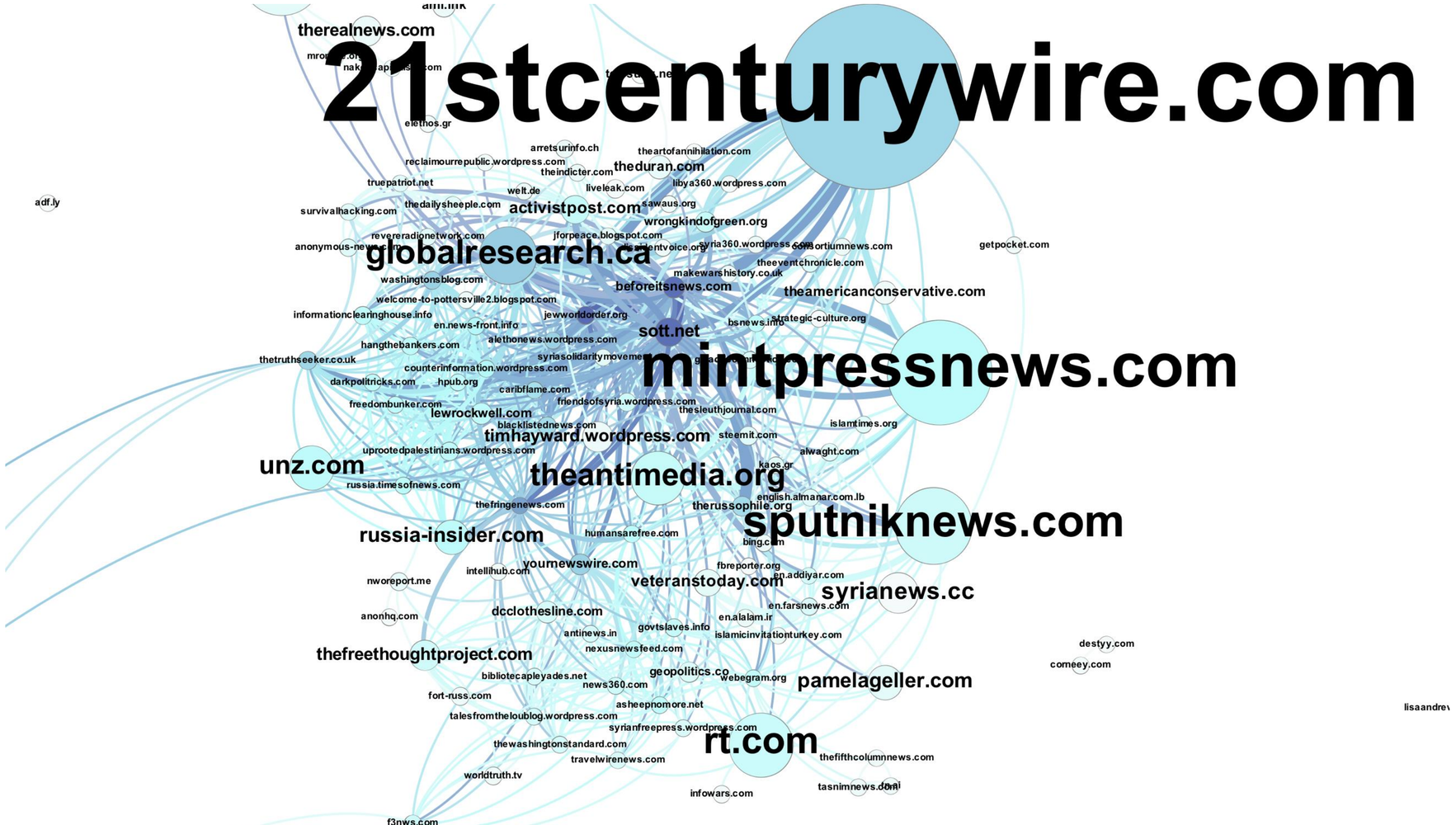

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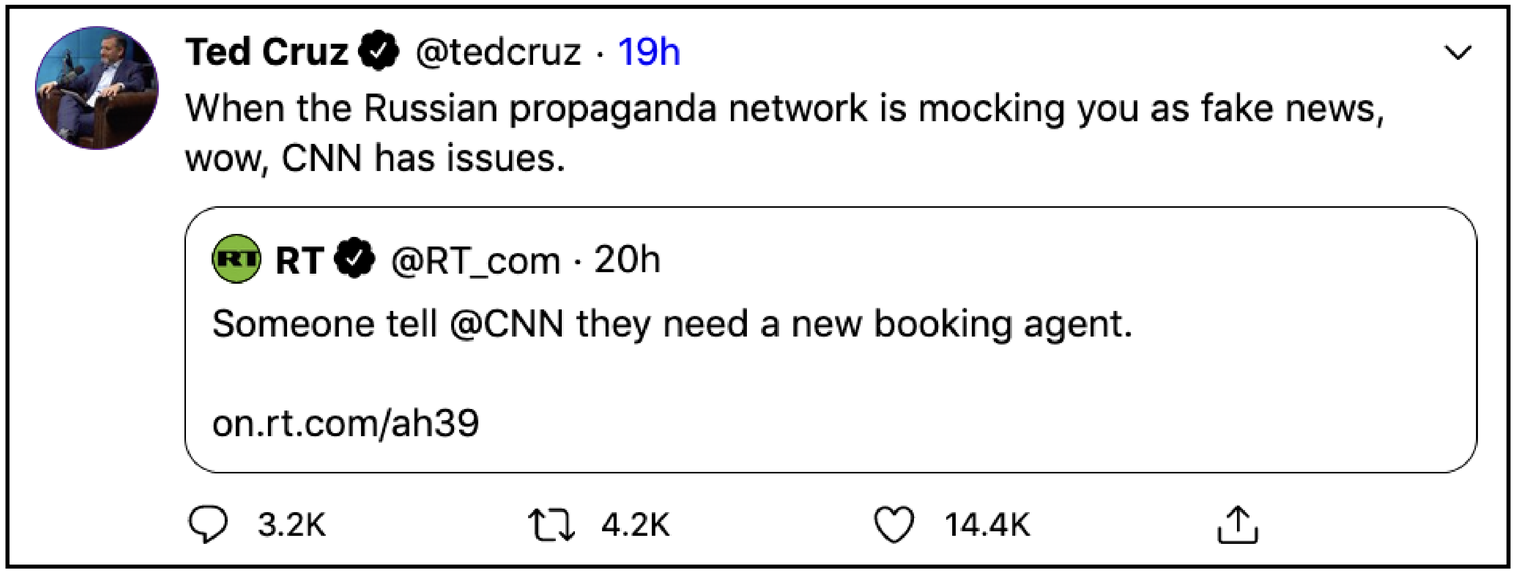

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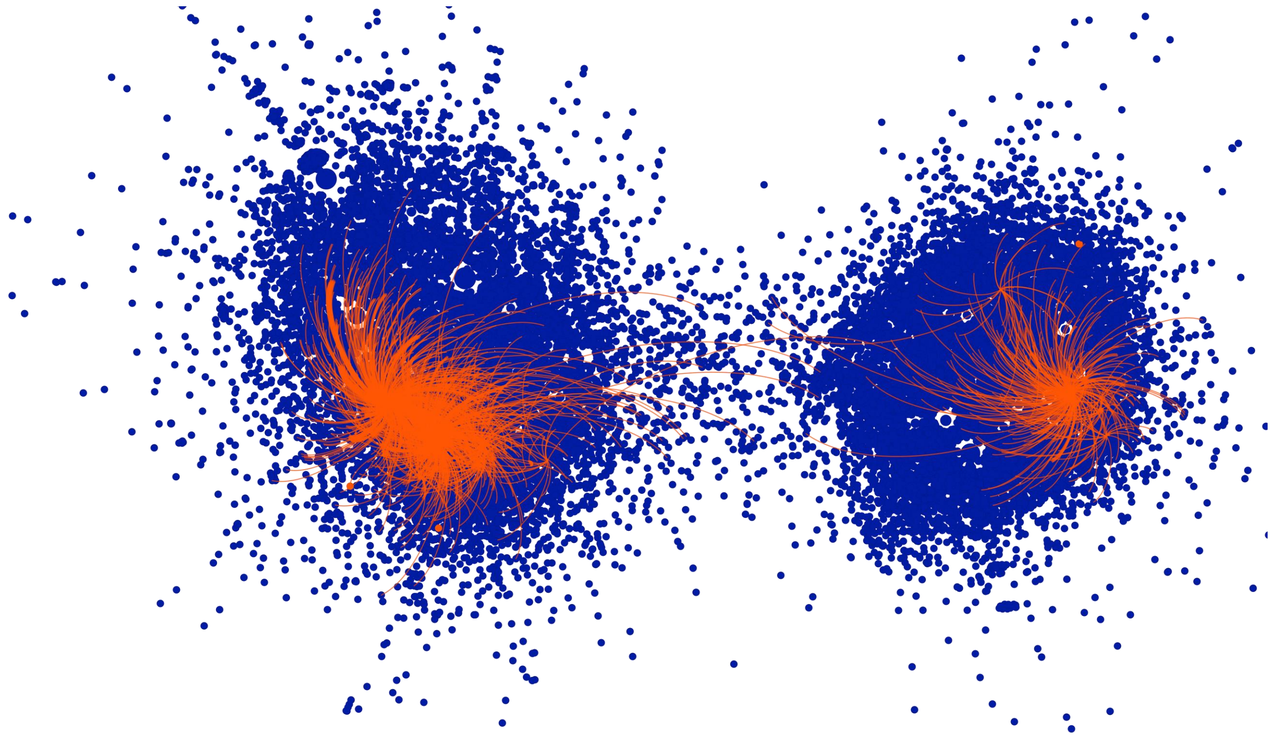

How Pervasive Mis- & Disinformation Threaten Democracy

- Diminished trust in information (and information systems)
- Increased division, loss of common ground
- Diminished trust in democratic institutions — government organizations, election results

UW Center for an Informed Public

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- One of the institutions funded by the Knight Foundation (5 years, 1/2 funding)
- Collaborative effort across iSchool, Law School, and Human Centered Design and Engineering
- Aim to add affiliates from diverse fields: Communication, Computer Science, Public Health, Sociology, Medicine, etc.
- Goals: Research, Education, Outreach, Tech Policy
- Expertise:
  Misinformation during crisis events (Spiro, Starbird)
  Misinformation and science (West)
  Disinformation (Starbird)
  Information literacy (Coward, West); Tech Policy (Calo)

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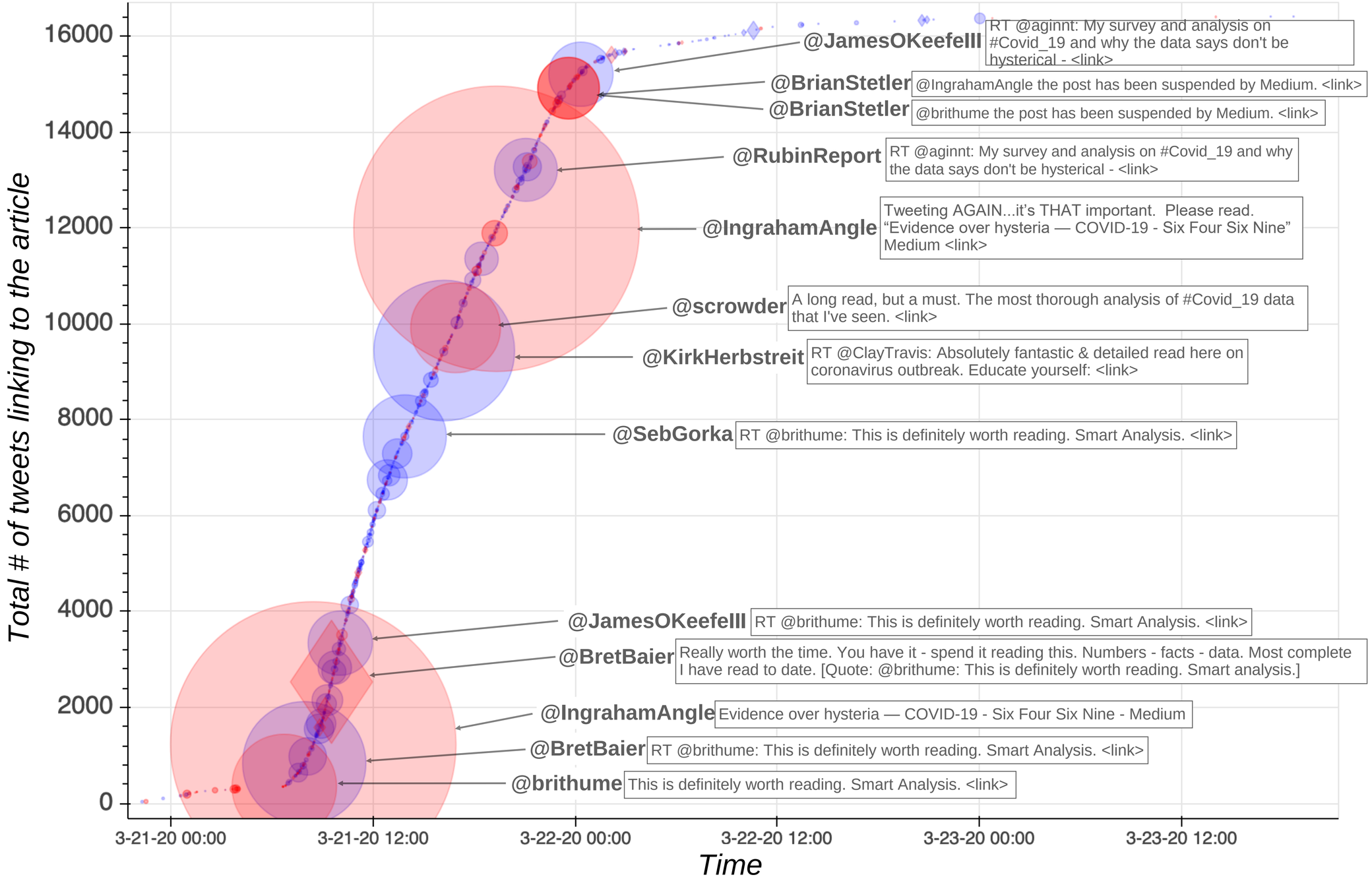
Emerging Research Questions

- Structure and dynamics of online mis/disinformation
- Understand the intersection of conspiracy theorizing (networks, algorithms, epistemologies) with the online spread of disinformation
- Science, science communication, science credentialing, and misinformation
- Exploration of the role of “attention dynamics” in spread of misinformation

How a misleading Medium article “went viral”



Our Methodological Approach

- Extensive experience studying the use social media during disruptive events
- Have boot-strapped socio-technical infrastructure to conduct this kind of research
- Mostly use publicly available data, but are increasingly relying on “special access” from platforms — based on grant proposals and relationships
- Adapting methods from “crisis informatics” to the study of misinformation
- Integrating visual, quantitative, and qualitative methods
- Closeness to data has enabled insight in emerging phenomena

Long-Term Objective: Supporting Researchers & Journalists

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- How do we “scale up” the ability to do this kind of research

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- How do we “scale up” the ability to do this kind of research
- Challenges for social scientists and journalists
  - Access to data
  - Technical support for collecting, storing, analyzing data
  - Methodological support for defining, adapting, and answering their questions

Investing in Infrastructure to Support Collaborations

- At the CiP, we are trying to build/extend our **Socio-Technical infrastructure**
  - Technical systems for data collection, storage, processing
  - Methods for analyzing “big” social data
  - Not just data and tools — envision solutions as collaborations (but that’s HARD)

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- Example: Hiring a data engineer (why PhD student is wrong person for this)

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- Example: Hiring a data engineer (why PhD student is wrong person for this)
- Challenge: Balancing commitments to conduct our own original research and to support others’ research

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HCDE Human Centered Design & Engineering

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NSF CISE+SBE: Virtual Roundtable on Harnessing the Computational and Social Sciences to Solve Critical Societal Problems