Five Reasons Why Algorithmic Accountability Is Hard

Nicholas Diakopoulos
Northwestern University, School of Communication
www.nickdiakopoulos.com | @ndiakopoulos | nad@northwestern.edu
Five Reasons

1. Information Deficits
2. Sociotechnical Assemblages
3. Temporal Instability
4. Expectation Setting
5. Legal Barriers
External auditing may suffer from knowledge gaps.

Omitted variable bias

Mechanism identification difficult from observational studies

Cooperating target still controls access
Intertwined assemblages of algorithms and people

Feedback loops reflect / amplify human behavior

Notion of responsibility diffused through complexity

Image: @davidseibold on Flickr
Dynamic systems that can change at almost any time (or not)

Randomness and probabilistic behavior

Tradeoffs between sampling rates and resources for auditing

Conveying results dynamically, beyond monitoring dashboards
What **should** be the behavior of an algorithm?

Where does that **expectation** come from?

How do we **define** that and measure it quantitatively?
Public records laws (e.g. FOIA) and accessibility of government algorithms

Computer Fraud and Abuse Act (CFAA) and chilling effects on audits
Thanks! Questions?

Contact
Nick Diakopoulos
Twitter: @ndiakopoulos
Email: nad@northwestern.edu
Web: http://www.nickdiakopoulos.com
Web: http://www.algorithmtips.org