



Data&Society

REPORT ON ACTIVITIES

2014-2015

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Data & Society is a research institute in New York City that is focused on social, cultural, and ethical issues arising from data-centric technological development.

The issues that Data & Society seeks to address are complex. The same innovative technologies and sociotechnical practices that enable novel modes of interaction, new opportunities for knowledge, and disruptive business paradigms can also be abused to invade people's privacy, provide new tools of discrimination, and harm individuals and communities.

To provide frameworks that can help society address emergent tensions, Data & Society is committed to identifying issues at the intersection of technology and society, providing research that can ground public debates, and building a network of researchers and practitioners who can offer insight and direction.

To advance public understanding of the issues, Data & Society brings together diverse constituencies, hosts events, does directed research, creates policy frameworks, and builds demonstration projects that grapple with the challenges and opportunities of a data-soaked world. Data & Society weaves together researchers, entrepreneurs, activists, policy creators, journalists, geeks, and public intellectuals to debate and engage one another on the key issues.

The work and well-being of Data & Society is strengthened by the diversity of our network and our differences in background, culture, experience, and much more. We are committed to making certain that a wide array of perspectives are heard and that our research is publicly available.



from the president

letter from danah boyd

What makes Data & Society possible is our collective commitment to understanding how society is shaping and shaped by new technologies and our ongoing desire to inform the public about what we find.

It's hard to imagine that a kernel of an idea that formed in 2013 when I was six months pregnant has turned into a vibrant, eclectic community full of thinkers and doers willing to address some of the most pressing and complicated issues our society is facing. In our first year of operating, we have hosted an event with the White House, grappled with the ways in which labor and civil rights are being reconfigured by new technologies, and built a network of researchers and practitioners who play a central role in identifying, understanding, and responding to challenges introduced by data-driven technologies in society. Our fellows program has helped create new synergies, and Databites, our weekly lunch sessions, have broadened our community reach and understanding of emergent issues. Behind the scenes, we've worked diligently to create an infrastructure to enable this community to grow, tackle key issues, and share what we learn.

What makes Data & Society possible is our collective commitment to understanding how society is shaping and shaped by new technologies and our ongoing desire to inform the public about what we find. All too often, new data-driven technologies are deployed with little consideration for how they may interact with society as a whole. Our goal is to be prepared for what we know is emerging and make certain that we have our heads wrapped around the implications so that we can move the conversation away from the perennial utopia/dystopia binary and into a more productive and thoughtful place. This is only possible when a large community of researchers and practitioners comes together to identify, think through, and respond to emergent developments.

From the research we do to the communities that we bring together, Data & Society is poised to help create a more informed public. I'm proud to be a part of such an insightful team and looking forward to seeing how we can continue to address the hard challenges in front of us!

danah boyd

Founder and President

Data & Society began as a big idea with a small board, a score of advisors, and a pair of staff working from a series of temporary homes to build the organization.

Advisors and friends were convened for a pair of brainstorming sessions in November 2013, and Data & Society posted its initial call for fellowship applications in December. The call for fellows was the Institute's first public announcement — and constituted a kind of beta launch that was followed up in March 2014 by another coming out: "The Social, Cultural & Ethical Dimensions of 'Big Data'," a daylong event organized in collaboration with the White House and New York University's Information Law Institute. Incoming fellows were introduced to one another at an internal soft launch in July, and in October 2014, Data & Society officially launched with a small conference and a large party at the Rubin Museum of Art.





The many, messy interconnections among Data & Society's inquiries and activities and community are a feature, not a bug, as we attempt to create cross-disciplinary insights and provocations along the "&" in Data & Society.

Agenda

Data & Society has grown in its first eighteen months to embrace a set of interrelated research initiatives; additional projects that stretch our collective work; and programs and network-building efforts. The many, messy interconnections among Data & Society's inquiries and activities and community are a feature not a bug, as we attempt to create cross-disciplinary insights and provocations along the "&" in Data & Society.

Current institutional research initiatives include: Data & Fairness; the Future of Labor in a Data-Centric Society; Enabling Connected Learning; Intelligence and Autonomy; Ethics in "Big Data" Research; and Privacy. These initiatives are joined by projects in different states of maturity covering financialization, crowd labor, workplace surveillance, science fiction, the market for privacy, data and human rights, urban science, evidence in health policymaking, infrastructure, and magic.

Alongside our research work, events are Data & Society's principal mode for bringing together diverse people and perspectives in order to tease out and contend with the complexities of networked society. This year, in addition to our launch celebration, we collaborated with a range of organizations and actors to host two large, substantive events. We also started up Databites, an ongoing series of weekly luncheon talks.

Our work is having an impact. The clearest example is that the themes (discrimination, notably) highlighted in the materials for "The Social, Cultural & Ethical Dimensions of 'Big Data'" were strongly represented in the White House's May 2014 report, Big Data: Seizing Opportunities, Preserving Values, and have not only provided the foundation for our work and partnerships around data and civil rights broadly but have moved to the center of public discussion of the social effects of "big data."

Infrastructure

In December 2014, the Institute moved into its first real office space, a loft on the top floor of 36 West 20th Street. This beautiful space was custom-renovated to encourage community solidarity, collaboration, networking, and productivity. It has already served as the venue for a broad range of activities, everything from day-to-day working to community research presentations to initiative-specific meetings and events.

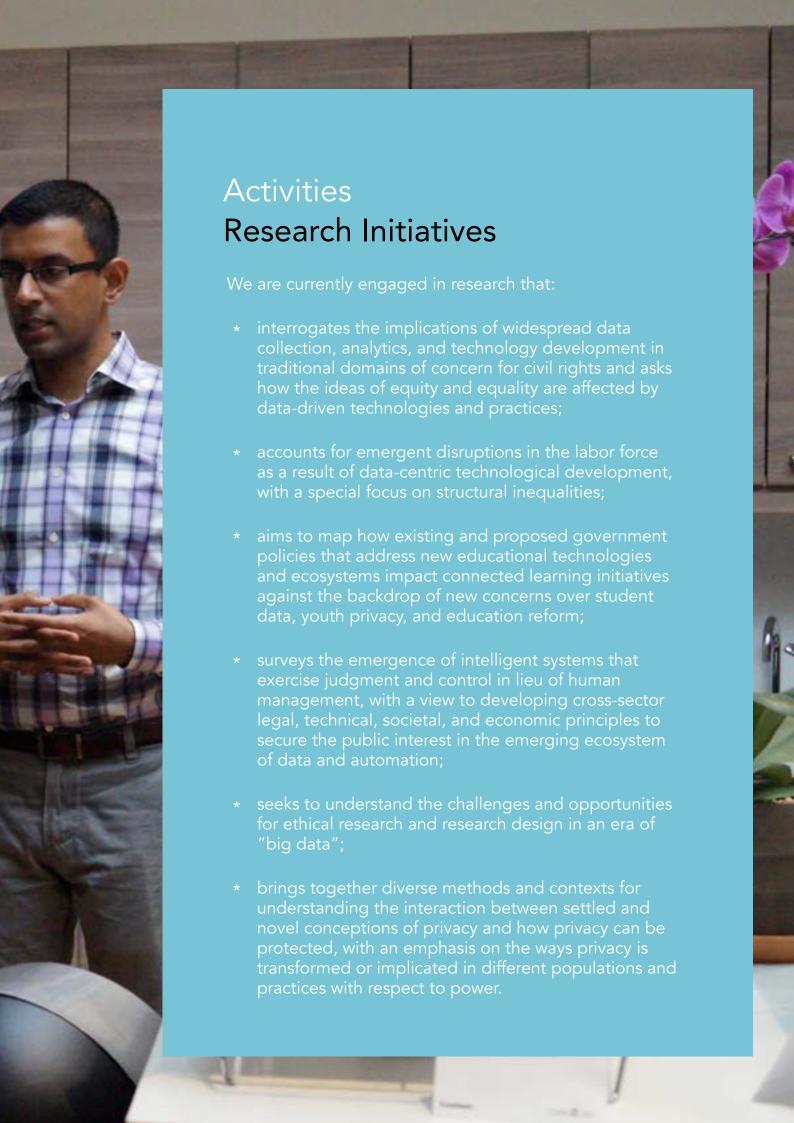
Since launching, Data & Society has expanded to include additional advisors (28 including the board), specialized staff (6), in-house researchers (10), affiliates (7) who bring their expertise to bear on specific initiatives, and, of course, our first class of fellows (12). In early 2015, we strengthened both our operations and research capacity with a string of hires who will support our initiatives, community, and communication efforts.

Thanks

The Institute is fortunate to have the support and guidance of a diverse group of advisors – academics and practitioners from a range of relevant fields. Their participation has been essential to Data & Society's success so far.

We are also truly grateful for the generous unrestricted gift from Microsoft that made Data & Society possible, as well as for the generosity and trust of our growing number of project funders, who are listed at the end of this report.





Data & Fairness

Project Team



danah boyd



Kari Hensley



Anika Collier Navaroli



Solon Barocas



Seeta Peña Gangadharan



Alexandra Mateescu



Alex Rosenblat



Martha Poon

Recognizing increasing concerns over how data may be used to enable or violate civil rights, Data & Society is working to identify emergent issues and provide research that may help inform the discussions that are underway. Data & Society is working with civil rights groups, technologists, and researchers to identify issues where new technologies enable or complicate conversations around equity, inequality, and fairness. The goal of this project is to bridge technical and social conversations and provide information that may be helpful in sparking thoughtful conversations and enabling productive interventions.

The Data & Fairness initiative is currently supported by the Ford Foundation.

Initiatives: Data & Fairness

This project builds on the amazing work of civil rights leaders to help imagine a set of "Civil Rights Principles for the Era of 'Big Data'" and the efforts of the White House to raise civil rights concerns as part of their review of big data. In March 2014, Data & Society hosted a conference as part of the White House's review process. "The Social, Cultural & Ethical Dimensions of 'Big Data" focused heavily on questions of inequity, unintended consequences. and discrimination. (Primers and workshop notes, as well as video of the proceedings, can be accessed at http:// www.datasociety.net/ initiatives/2014-0317/.) Questions raised at that event helped fuel the development of this initiative, which benefits from ongoing collaboration with the Leadership Conference on Civil and Human Rights, New America's Open Technology Institute, and Upturn.

Data & Civil Rights Conference

On October 30, 2014, Data & Society, the Leadership Conference, and New America teamed up to host the first Data & Civil Rights Conference to identify and discuss opportunities and challenges presented by "big data" in the realm of civil rights. This conference

focused on examining existing civil rights issues and asking how the availability of data and the practices surrounding data analytics may alter the landscape, both productively and problematically.

To ground discussions at this conference, the team produced research primers on six different areas: criminal justice, education, employment, finance, health, and housing. In addition, the team put together a technology primer to ground the technology discussions. (Primers and workshop writeups, as well as breakout session writeups and video of the proceedings, can be accessed at http://www. datacivilrights.org/.)

Additional partners included the ACLU, the Center for Democracy & Technology, the Center for Media Justice, and Upturn. This event was made possible through the guidance and support of the Ford Foundation with additional funding and support by Bill & Melinda Gates Foundation, Robert Wood Johnson Foundation, the John S. and James L. Knight Foundation, Media Democracy Fund, Omidyar Network, and Open Society Foundations.

Police Body-Worn Cameras

Data & Society produced a primer on police body-worn

cameras that was released in February 2015.

In the wake of the police shooting of Michael Brown in August 2014, as well as the subsequent protests in Ferguson, Missouri and around the country. there has been a call to mandate the use of body-worn cameras to promote accountability and transparency in police-civilian interactions. Both law enforcement and civil rights advocates are excited by the potential of body-worn cameras to improve community policing and safety, but there is no empirical research to conclusively suggest that these will reduce the deaths of black male civilians in encounters with police. There are some documented milder benefits evident from small pilot studies, such as more polite interactions between police and civilians when both parties are aware they are being recorded, and decreased fraudulent complaints made against officers. Many uncertainties about best practices of body-worn camera adoption and use remain, including when the cameras should record, what should be stored and retained, who should have access to the footage, and what policies should determine the release of footage to the public. As pilot and permanent body-worn camera programs are implemented, the primer asks questions about how

they can best be used to achieve their touted goals. How will the implementation of these programs be assessed for their efficacy in achieving accountability goals? What are the best policies to have in place to support those goals?

Data & Finance

Fellow Martha Poon's work on the history of credit scoring has contributed sector-specific insight to the Institute's work on Data & Fairness. In conjunction with her history of FICO, Martha has been researching the intertwined developments of information technology, digital networks, data, and financial innovation. Is it fair for consumers to be charged different prices based on data? Does risk-based pricing reinforce economic inequalities?

The Future of Labor in a Data-Centric Society

Project Team



Tamara Kneese



Alex Rosenblat

Technology is disrupting, destabilizing, and transforming many aspects of the labor force. Data & Society seeks to better understand emergent disruptions in the labor force as a result of data-centric technological development, with a special focus on structural inequalities.



Dean Jansen



Karen Levy

Initiatives: The Future of Labor in a Data-Centric Society

1. Fair Labor Practices in a Networked Age

Unionization emerged as a way of protecting labor rights when society shifted from an agricultural ecosystem to one shaped by manufacturing and industrial labor. New networked work complicates the organizing mechanisms that are inherent to unionization. How, then, do we protect laborers from abuse, poor work conditions, and discrimination?

2. Networked Employment Discrimination

As businesses begin implementing algorithms to sort through applicants and use third party services to assess the quality of candidates based on their networks, personality tests, and other scores, how do we minimize the potential discriminatory outcomes of such hiring processes?

3. Workplace Surveillance

Employers have long devised techniques and used new technologies to surveil employees in order to increase efficiency, decrease theft, and otherwise assert power and control over subordinates. New and cheaper networked technologies make surveillance easier to implement, but what are the ramifications of widespread workplace surveillance?

4. Technologically Mediated Artisanal Production

From 3D printing to maker culture, there's a rise of technical practices that resist large industrial and corporate modes of production, similar to what is occurring in artisanal food and agriculture. While DIY practices are not new, the widespread availability and cheap cost of such tools has the potential to disrupt certain aspects of manufacturing. How do we better understand what is unfolding?

5. Understanding Intelligent Systems

Science fiction has long imagined a workforce reshaped by robots, but the increasingly common instantiation of intelligent systems in business is much more mundane. Beyond the utopian and dystopian hype of increased efficiencies and job displacement, how do we understand what disruptions intelligent systems will have on the workforce?

Ethical Crowd Labor

Fellow Dean Jansen's project exploring the possibilities for ethical practices in crowd labor platforms has provided additional insight in our Future of Labor work around fair labor. As a co-founder of Amara, a trusted and successful website for creating and translating subtitles for online videos, Dean has concrete and practical objectives in asking: What's new in crowd work models? What kinds of guarantees should society make to people working as part of a distributed crowd? How would those guarantees affect competitiveness? Would unregulated crowd labor be sustainable? What is the proper compensation? What do crowd workers want and care about?

Workplace Surveillance

Fellow Karen Levy's work on the electronic surveillance of long-haul truckers, specifically, and on the introduction of digital monitoring into organizations, generally, has contributed to the Future of Labor initiative's approach to workplace surveillance. The use of digital technologies for enforcing and incentivizing behaviors is becoming pervasive across institutional contexts, including in policymaking. What are the effects of this shift? What happens when technology is deployed to perfect the administration of regulations? What are the privacy and security risks when employers collect personal data, e.g., concerning health or location? How are social relations reconfigured within organizations?

Automation

The Intelligence and Autonomy initiative, led by fellow Tim Hwang, has provided useful framing and research around the question of how intelligent systems will affect the work force.

With the support of the Open Society Foundations' U.S. Programs Future of Work inquiry, we produced working papers in the five above areas, which were released in October 2014.

Enabling Connected Learning

Project Team



Monica Bulger



Zachary Gold



Kari Hensley



Elana Zeide

Enabling Connected Learning is funded by the John D. and Catherine T. MacArthur Foundation.

Initiatives: Enabling Connected Learning

What is the value of data in education and learning? Enabling Connected Learning was initiated to better understand the relationship between U.S. governmental policy, technology development, and innovative learning initiatives.

This initiative is also seeking to support the Cities of Learning movement in order to create bridges between different learning environments, all with the learner at the center.

As young people embrace technology to learn, play, and socialize, the boundaries between education, the home, and society get increasingly blurred. New concerns have emerged over student data, youth privacy, and educational reform. Federal and state policies focused on children, education, and technology influence what learning initiatives are possible. Privacy, safety, and security all shape the trustworthiness of different digital platforms and learning ecosystems, even as data can be used to enable new forms of learning and new opportunities for advancing education. While these issues are publicly debated and politically fraught, research to ground these conversations is limited.

The goal of this project is to better understand exactly how existing and proposed policies affect connected learning initiatives and where and when student data can and should be used. We are working with technology developers, policymakers, and researchers to identify and address issues that hinder efforts to empower young people and advance their learning opportunities.

Intelligence and Autonomy

Project Team



Tim Hwang



Madeleine Clare Elish



Gideon Lichfield

Data, automation, and algorithms are increasingly being combined to create intelligent systems, software that exercises judgment and control in lieu of human management. While these systems are often not by themselves novel, recent years have seen the emergence and mass implementation of these technologies in a variety of critical arenas within society.

The Intelligence and Autonomy initiative is supported by the John D. and Catherine T. MacArthur Foundation and the Microsoft Technology Policy Group.

Initiatives: Intelligence and Autonomy

This includes the use of intelligent systems in transportation, medicine, warfare, finance, as well as in the home. In light of these developments, there remain open and important questions as to how these systems should be regulated, if at all, and how regulatory regimes could protect consumers and the public good while also enriching opportunities for innovation. Although key actors in the public and private sectors are beginning to turn to these questions, the dominant approach in the space has been to treat intelligent systems where they appear as unique, industry-specific issues.

The Intelligence and Autonomy (I&A) initiative seeks to develop general principles applicable across sectors to secure the public interest in this new technological ecosystem. The intent is to take an interdisciplinary approach that draws on valuable lessons across sectors and through comparison to historical precedent. Our objective is to create coherent, common frameworks that will enable more effective policymaking and encourage more informed public debate.

In its first year, I&A has been focusing on the development of three aspects of the project:

Case Studies

I&A is developing a series of case studies that analyzes how specific automated, proto-intelligent, and intelligent systems have been regulated and how social norms have developed around these systems. Focused through a historical and cultural lens,

the case studies draw out common themes across intelligent systems within different arenas. In February 2015, I&A released "Praise the Machine! Punish the Human! The Contradictory History of Accountability in Automated Aviation," a white paper that explores the legal and social history of two proto-intelligent technologies, autopilot and cruise control, in order to provide a framework for thinking about liability when driverless cars become commercially available.

Identifying Cross-Cutting Challenges

On March 24-25, 2015, I&A held its first annual forum, which convened scholars, technologists, and stakeholders working across different arenas relevant to the emergence of intelligent systems. The goal of the forum was to identify common policy challenges raised by the widespread implementation of intelligent systems and to surface the linkages between the various contexts in which these technologies are emerging. To initiate and provoke discussion, I&A commissioned four fiction authors to envision future scenarios for intelligent systems in four domains: medicine, labor, urban design, and warfare. In May 2015, the future scenario around medicine, a story by Robin Sloan titled "The Counselor," was published on VICE's Motherboard along with a commentary drawn from themes explored at the event about the potential persuasive weaponry within intelligent systems.

Building the Pattern Library

I&A is in the early stages of developing a publicly-accessible pattern library of best practices to aid designers, engineers, and policymakers in the creation and implementation of intelligent systems. Through a series of interviews with industry specialists, I&A hopes to surface solutions applicable across domains on how systems designers have protected broader values such as user trust, safety, and fairness in the construction of their systems.

Science Fiction

Intelligence and Autonomy has benefitted from fellow Gideon Lichfield's experiments with science fiction as a way to narrate the complicated technology and society stories of today — imagined futures as a way of doing journalism. Gideon's insight is that the most accessible thinking about how technology changes society is found in science fiction. His short story "Override" was one of a quartet used to ground conversation at Intelligence and Autonomy's first annual forum in March 2015.

Ethics in "Big Data" Research

Data & Society's Ethics in "Big Data" Research initiative currently consists of two projects: Council for Big Data, Ethics, and Society and Supporting Ethics in Data Research.

Council for Big Data, Ethics, and Society

The Council for Big Data, Ethics, and Society was started in 2014 to provide critical social and cultural perspectives on big data initiatives. The Council brings together researchers from diverse disciplines — from anthropology and philosophy to economics and law — to address issues such as security, privacy, equality, and access in order to help guard against the repetition of known mistakes

and inadequate preparation. Through public commentary, events, white papers, and direct engagement with data analytics projects, the Council will develop frameworks to help researchers, practitioners, and the public understand the social, ethical, legal, and policy issues that underpin the big data phenomenon.

Council Members

Alessandro Acquisti Edward W. Felten Eric Meslin Frank Pasquale Mark Andrejevic Seeta Peña Gangadharan Jake Metcalf Latanya Sweeney Solon Barocas Alyssa Goodman Arvind Narayanan Sharon Traweek Geoffrey Bowker Rachelle Hollander Alondra Nelson Matt Zook

danah boyd Emily F. Keller Helen Nissenbaum

Kate Crawford Barbara Koenig Paul Ohm

The Council is supported by the National Science Foundation and is directed by danah boyd, Geoffrey Bowker, Kate Crawford, and Helen Nissenbaum

Initiatives: Ethics in "Big Data" Research

Supporting Ethics in Data Research

New and complex data sets raise challenging ethical questions about risk to individuals that are not sufficiently covered by computer science training, ethics codes, or Institutional Review Boards. The use of publicly available, corporate, and government datasets may reveal human practices, behaviors, and interactions in unintended ways, creating the need for new kinds of ethical support. This project examines the role of research librarians in assisting computer science researchers as they navigate emerging issues of privacy, ethics, and equitable access to data at different phases of the research process.

This exploratory project builds on the emerging support systems, including assistance from the research library, for computer science researchers that has resulted from Data Management Plans required by federal funders. Drawing on their data management skills and knowledge of information ethics, academic librarians may be well poised to act as partners to computer science and engineering researchers throughout the research process, including the use of third-party data.

Project Team



Bonnie Tijerina



Emily F. Keller

Dr. Rachelle Hollander, Director for the Center for Engineering, Ethics, and Society at the National Academy of Engineering, serves as a project advisor.

This project is supported by the Alfred P. Sloan Foundation.

Privacy

Broadly speaking, privacy is a concern that arises in the context of most of Data & Society's initiatives and projects, and contributions to our understanding of the issues at play have come from all corners of the community. We have numerous workstreams addressing different aspects of privacy.

Digital Privacy & Data Literacy

Libraries serve a critical role of providing free access to the web. The key challenges are accessibility, speed and affordability, but too often the conversation is missing a host of critically important privacy considerations. The extent of government surveillance programs, differential treatment of online consumers (data profiling), and the need for protection of sensitive personal data have ramped up the urgency of addressing these matters.

In response to this need, Data & Society partnered with Brooklyn Public Library, METRO, and New America to focus on data and privacy literacy by providing in-person education and training to 600+ information and library professionals in the New York metropolitan area, as well as online resources to librarians across the country.

This partnership, led by the library community, brings together organizations and individuals who are concerned about the impact of surveillance and data collection on citizens, specifically on disadvantaged communities, and further strengthens libraries' status as trusted gateways to information and knowledge.

Project Team



Bonnie Tiierina



Seeta Peña Gangadharan

The Institute of Museum and Library Services is supporting the Data Privacy & Data Literacy project.

Initiatives: Privacy

Privacy and Harm in a Networked Society

Privacy is not something that one has, but something that one seeks to achieve. It requires constant negotiation as information flows and contexts shift. To achieve privacy in a networked world, people must actively try to manage the various social situations in which information is accessed, consumed, interpreted, and shared. They cannot simply focus on restricting the flow of information; they must also account for the ways in which information is inferred and used.

The goal of this project is to better understand how privacy is understood in a networked society and the ways in which control is complicated by the networked nature of information. This project seeks to examine how a theory of networks can better elucidate social, cultural, and legal models of privacy and jurisprudence in a data-centric era.

Project Team







Alice Marwick

Is There a Market for Privacy?

Fellow Lani Cossette's project examining the prospects for privacy-protective services and tools has helped to ground thinking about privacy around the Institute. The project has involved interviewing entrepreneurs, investors, and analysts about online services that are trying different business models than generating revenue through data mining in order to sell advertising. Are there alternatives to the dominant, well-funded model of online advertising? After the Snowden leaks, will services like DuckDuckGo succeed? What can we learn from the people building and investing in them?

Data & Human Rights

Under fellow Mark Latonero's leadership, Data & Society has been pursuing questions of ethics and efficacy around the intersections of data, human rights and security, and development, with a particular interest in vulnerable populations and mobile and Internet-based technologies.

Project Team







Zachary Gold

With his team at the Annenberg Center on Communication Leadership & Policy, Mark's recent focus has been on the research and development of tools and methods for monitoring human trafficking. Another area of interest has been the role of social media and digital data in emergency and disaster response and relief.

We are actively developing the Data & Human Rights project into a signature research initiative of the Institute.

As part of our Data & Human Rights work, Data & Society partnered with UN Global Pulse and the Responsible Data Forum for a July 2014 workshop on "Responsibility and private sector data." The workshop grappled with "data philanthropy," how private sector data can be used ethically for public good by the social sector, and explored the ethical, privacy and security challenges posed by accessing and using private sector data. The workshop is written up at http://www.datasociety.net/2014/08/responsible-data-forum-on-private-sector-data-sharing/.

What Counts as Evidence?

Along with a group of senior colleagues at the Columbia University Mailman School of Public Health, fellow Dave Johns is investigating the work of the US Preventive Services Task Force (USPSTF), a quasi-governmental body that conducts systematic reviews of the evidence on the effectiveness of preventive services for the federal government. The USPSTF is a flagship organization in the "evidence-based" movement that has roiled the health sciences over the past 25 years. It advocates strict standards for data and evidence, heavily prioritizes the results of randomized controlled trials, and regards clinical judgment—historically the main driver of treatment guidelines—as little better than useless. USPSTF findings frequently go against the conventional medical wisdom or conclude that there is "insufficient evidence" to support widely accepted interventions. Dave's work has enriched Data & Society's collective thinking about the social and political dynamics that construct "data" in various contexts.

Cities of Data

Fellow Anthony Townsend, author of Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia, leads Data & Society's work on data and urban planning and development.

Project Team





Anthony Townsend

Alissa Chisolm

The Cities of Data project is currently focused on the rapid growth of data-intensive urban research at universities and think tanks around the world, and the social, economic, and political impacts of the predictive science of cities they seek to develop.

The positive impacts on city management are increasingly clear, but the possible risks haven't been adequately explored. Cities of Data asks whether the current boom in quantitative methods is doomed to the failures of earlier waves of computer modeling of complex urban phenomena and whether the opportunities of networked citizen engagement can help overcome this potential outcome.

Infrastructure + Magic

Fellow Ingrid Burrington, Data & Society's de facto artist in residence, has pursued two parallel interests: 1) legibility—explorations of Internet infrastructure and strategies for mapping and making visible the mundane physical layer of the net that enables the data flows that are at the heart of Data & Society's research; and 2) magic—engaging with magic as a set of social and metaphorical practices mixed up in contemporary understandings of technology. Through Ingrid, Data & Society has helped to support gatherings around these themes, as well as the printing of Ingrid's popular Networks of New York: An Internet Infrastructure Field Guide, which, in the style of an Audubon Society bird book, enumerates the street markings and network devices located throughout NYC's public spaces.





Our inaugural class of fellows:

Ingrid Burrington



Ingrid Burrington is an artist who writes, makes maps, and tells jokes about places, politics, and the weird feelings people have about both. She researches, writes about, and organizes public programming around the influence of computational systems of perception and representation.

Lani Cossette



Lani Cossette is a Senior Attorney in the Office of Industry Affairs at Microsoft. She surveys and records the experiences of entrepreneurs who have developed new privacy-protective services that challenge the predominant business model (behaviorally targeted advertising). She also explores the various interests and influencing factors that have defined the paths of these companies.

Seeta Peña Gangadharan



Seeta Peña Gangadharan is a senior research fellow at the New America Foundation's Open Technology Institute. Her work focuses on digital equity, security, and privacy, and explores data profiling and discrimination experienced by historically marginalized groups. She is interested in examining different models for detecting and responding to data-driven discrimination in various contexts of social life.

Tim Hwang



Tim Hwang is a partner at Robot Robot & Hwang, a law firm and technology consultancy focusing on experiments at the intersection of legal and computer code. He leads an initiative seeking to develop general principles and common frameworks to guide policymaking as intelligent systems emerge and become increasingly ubiquitous in a variety of arenas including capital markets, warfare, medicine, transportation, and social life at large.

Dean Jansen



Dean Jansen is a co-founder of Amara.org and executive director of the Participatory Culture Foundation. He is conducting research aimed at articulating a vision for an equitable and economically viable future for crowd labor. Dean collaborates with crowd workers, entrepreneurs, activists, researchers, and others in the field, combining a dose of activism with elements of qualitative research, secondary research, and practical application.

David Merritt Johns



David Merritt Johns is a PhD candidate studying the history of public health in the Department of Socio-medical Sciences at Columbia University. His research examines the work of the US Preventive Services Task Force, a scientific panel charged by the federal government with providing evidence-based recommendations on the use of screening tests and other clinical preventive services.

Mark Latonero



Mark Latonero is a professor and research director at the USC Annenberg School's Center on Communication Leadership & Policy and leads its Technology and Human Trafficking Initiative. Mark is researching the intersections between data, development, and human rights, advancing the empirically-driven research needed to create a shared understanding of risks and benefits of data-centric approaches to social issues.

Karen Levy



Karen Levy is a sociologist who investigates how digital tools are used to enforce laws and rules, with a particular interest in the normalization of electronic surveillance within social and organizational relationships. Her research explores how digital monitoring changes social norms around accountability, discretion, and trust. Karen is a postdoctoral fellow at NYU's Information Law Institute and Department of Media, Culture, and Communication. She has a PhD in Sociology from Princeton and a JD from Indiana University Maurer School of Law.

Gideon Lichfield



Gideon Lichfield is a senior editor at Quartz, and looks at ways to enhance and broaden the public discussion of data and society issues that can sometimes be hard for the general public to get a grip on. Among the tools he explores is the use of science fiction as a way to report on, describe, and debate these issues by telling stories about imagined futures.

Martha Poon



Martha Poon is a social scientist interested in how data-intensive systems are changing the public's relationship to finance. She researches and writes about the impact of credit scoring technology on consumer access to credit. Martha develops strategies for investigating, explaining, and communicating the role of information systems in financial innovation.

Bonnie Tijerina



Bonnie Tijerina is a librarian, entrepreneur, and library community convener. She is founder and president of Electronic Resources & Libraries. Her work creates opportunities for education, debate, and discussion within the library profession around the increasingly complex concept of privacy in the digital world. Bonnie works closely with libraries to support user privacy and empower the general citizenry to make informed decisions about their data.

Anthony Townsend



Anthony Townsend is a Senior Research Scientist at New York University's Rudin Center for Transportation and focuses on the way new data is being used in academic research to decipher how cities work and how these new discoveries will be applied in local government. He explores frameworks for engaging citizen scientists more deeply in these efforts to encourage less technocratic styles of data-driven research and governance.

Network Buildinc

Databites

Data & Society's weekly speaker series,
Databites, is a key part of our effort to expand
our research network and the range of voices
our community is learning from and being
challenged by. We began opportunistically in
the summer of 2014 and have since ramped
up to hosting talks, with lunch provided,
every Thursday in the Data & Society loft.
Union Square Ventures, METRO, and NYU ITP
generously provided space for Databites while
the D&S loft was under construction. Talks are
now being recorded. In mid-2015 we will begin
to webcast them live.















Speakers and topics have included:

Heather Dewey-Hagborg and Alondra Nelson on DNA, identity, surveillance, and ethics;

Kath Albury on negotiating the politics of representation and risk on geo-locative hook-up apps;

Julia Angwin on the future of redlining;

Robin Stevens on social media, geography, and risk behavior among minority youth;

Jeffrey Lane on the prosecutorial affordances of social media;

Sarah Brayne on policing in the age of big data;

Melissa Morrone on the public library connection to digital privacy literacy;

Mary Madden on public perceptions of privacy and security in the post-Snowden era;

Ethan Zuckerman on civic engagement and effectiveness, and measuring effectiveness;

Kati London on designing entertainment for civic engagement;

Stephanie Hannon on utilizing Google resources (machines, people, data) for good;

Joshua Tauberer on if.then.fund, a project to bring citizens into the politics of campaign finance;

Phil Howard on civic engagement, bots, and the Internet of things;

Caitlin Petre on the production and consumption of reader metrics in online journalism;

Judith Donath on fashion as a signal of status in an information-centric society:

Claudia Perlich on online advertising;

Adam Berenzweig on deep learning, machine perception, and the future of memory;

Anoush Tatevossian, Alex Rutherford, and Mila Romanoff on UN Global Pulse's approach to big data;

Chris Wiggins on advancing the field of data science;

Jake Porway on DataKind's work and its ethical implications;

Jeff Larson and Jeremy Singer-Vine on data in the investigative newsroom;

NYPL Labs team on data landscapes of the New York Public Library;

Aaron Straup Cope on cultural heritage institutions' relation to data collection and preservation;

Jeff Hancock on the Facebook emotional contagion study;

Chris Whong on the privacy implications of publicly-available taxi trip data;

Daniel Barth-Jones and Felix Wu on open data releases and re-identification;

Ben Wellington on open data;

Sean Gorman on creating greater transparency through community driven incentives;

David Schleifer on how Americans use prices in healthcare;

John Loser on insurance in the age of big data;

Frank Pasquale on balancing privacy obligations and research aims in a learning healthcare system;

Seda Gürses on what happens when computer scientists are called upon for conflicting regulatory projects;

Nick Seaver on "captivating algorithms," recommender systems as traps;

Clay Shirky on how to think about regulating the effects of big data given various cognitive biases; and

Cathy O'Neil on mathematical models and what we can learn from the financial crisis.

Network Buildinc

Launch Celebration

On October 14, 2014, Data & Society held a mini-conference at the Rubin Museum of Art, which brought staff and fellows together with advisors, friends, and funders to hear a series of short talks on topics related to the emerging D&S research agenda:

Katherine Maher: "Data and Human Rights: Learning to Quantify Harm"

Solon Barocas: "Big Data's Disparate Impact"

Catherine Bracy: "Open Data + Organizing"

Anya Kamenetz: "Campbell's Law: why the wrong metrics are worse than

Angèle Christin: "Clicks or Pulitzers? How web metrics are transforming journalism"

Gilad Lotan: "Optimizing for Good"

Vasant Dhar: "The Rise of Machines in Financial Markets"

Harlo Holms: "Making Cameras Count"

Amy Fairchild: "Beyond Privacy: The Public Health Perks of Prying Eyes"

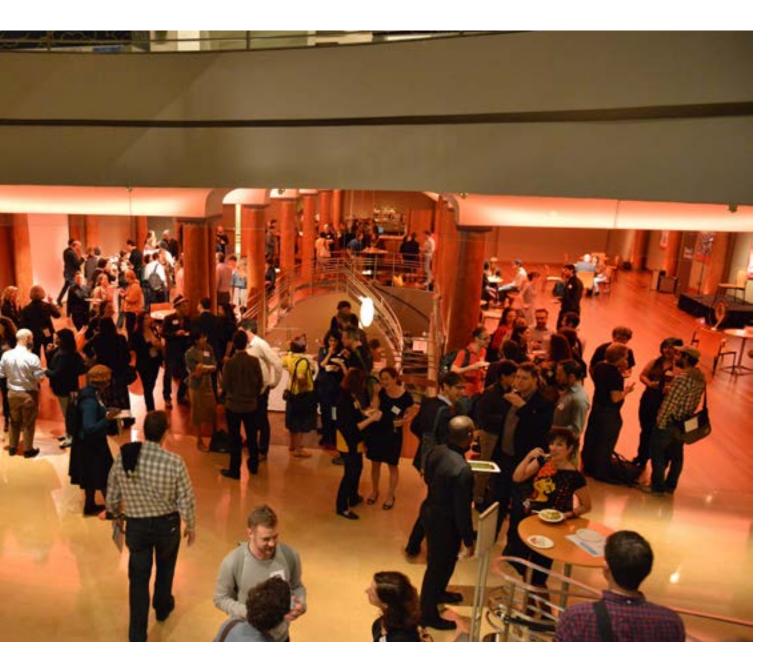
Matt Jones: "Mining the miners

danah boyd gave an overview of Data & Society and took questions and suggestions from the community on the Institute's future development.





Following the mini-conference, a public reception drew 275 people to the Rubin to hear brief remarks from danah boyd and to celebrate Data & Society's official launch. The party helped Data & Society to identify fellow travelers and new people to connect with. Fellow Ingrid Burrington curated a set of data-based and related works of art to entertain and provoke guests, and we gave away bioartist Heather Dewey-Hagborg's Erase™ (http://biogenfutur. es) to attendees as they disappeared into the city at the end of the evening.







Network Building

Whiskey Wednesdays

In 2015 we started up a weekly social gathering that makes space for the Data & Society community – staff, researchers, fellows, advisors, affiliates, friends, and interesting guests – to get to know one another and find areas of mutual interest. Whiskey Wednesdays are an ongoing part of our effort to expand and diversify our network.



Featured Output

The Social, Cultural & Ethical Dimensions of "Big Data"

March 17, 2014 NYU School of Law

This conference was organized by danah boyd (Data & Society Research Institute / Microsoft Research) with help from Helen Nissenbaum (New York University), Geoffrey C. Bowker (University of California-Irvine), and Kate Crawford (Microsoft Research / MIT Center for Civic Media).







The conference was built around a set of workshop primers intended to map our knowledge in certain domains and ground conversation and future work:

Algorithmic Accountability

Data Supply Chains

Inferences and Connections

Interpretation Gone Wrong

Inequalities and Asymmetries

Predicting Human Behavior

The Data & Society Research Institute acknowledges the generous gifts and institutional support of the following sponsors for making this event possible: Alfred P. Sloan Foundation, Ford Foundation, John D. and Catherine T. MacArthur Foundation, the John S. and James L. Knight Foundation, Microsoft Research, and Robert Wood Johnson Foundation.

Related:

danah boyd, Seeta Peña Gangadharan, and Solon Barocas submitted comments to the Federal Trade Commission in advance of its September 2014 workshop on "Big Data: A Tool for Inclusion or Exclusion?"

Featured Output

Data & Civil Rights: Why "Big Data" is a Civil Rights Issue

October 30, 2014 Newseum, Washington D.C.

This event was made possible through the guidance and support of the Ford Foundation with additional funding and support by Bill & Melinda Gates Foundation, Robert Wood Johnson Foundation, the John S. and James L. Knight Foundation, Media Democracy Fund, Omidyar Network, and Open Society Foundations.





Building on the mode and selected themes of The Social, Cultural & Ethical Dimensions of "Big Data", Data & Society's next big substantive event also entailed a set of primers that map what is known about data and civil rights in six areas, plus one on technology generally:

Employment
Consumer Finance
Health



Police Body-Worn Cameras

In February 2015 the Data & Fairness initiative released a working paper by Alexandra Mateescu, Alex Rosenblat, and danah boyd that maps current knowledge about police body-worn cameras and points up hard questions that need to be asked about their use.

In addition to helping journalists come to grips with the paper's questions, Alex Rosenblat and danah boyd subsequently published a distillation of its primary findings in a piece for The Atlantic, "It's Not Too Late to Get Body Cameras Right."

The Data & Fairness initiative's work on body cameras has fed into ongoing conversations among civil rights actors, and Data & Society joined several civil rights and social justice organizations in signing onto the "Civil Rights Principles on Body Worn Cameras" announced on May 15, 2015, by The Leadership Conference on Civil and Human Rights.

Related:

On May 4, 2015, D&S advisor Janet Vertesi published an op-ed in *Time* which builds in part on D&S's work: "The Problem With Police Body Cameras."

Selected Publications

Data & Fairness

Data-Based Discrimination	Data and Discrimination: Collected Essays, 2014 edited by Virginia Eubanks, Solon Barocas, and Seeta Peña	Seeta Peña Gangadharan
The Networked Nature of Algorithmic Discrimination	Gangadharan	danah boyd, Karen Levy, and Alice Marwick
Does literacy improve finance?	Public Understanding of Science, 2015	Martha Poon and Helaine Olen

The Future of Labor in a Data-Centric Society

Understanding Intelligent Systems Technologically Mediated Artisanal Production Understanding Fair Labor Practices in a Networked Age Networked Employment Discrimination Workplace Surveillance	working papers, 2014 supported by the Open Society Foundations' U.S. Programs Future of Work inquiry.	Alex Rosenblat, Tamara Kneese, and danah boyd, with assistance from various fellows
The Contexts of Control: Information, Power, and Truck-Driving Work	The Information Society: An International Journal, 2015	Karen Levy

Intelligence and Autonomy

Praise the Machine! Punish the Human! The Contradictory History of Accountability in Automated Aviation	white paper, 2015	Madeleine Clare Elish and Tim Hwang
Override The Winter of Our Discontent The Four Mirrors of War The Counselor	science fiction stories developed for the first annual Intelligence and Autonomy forum, March 2015	Gideon Lichfield Madeline Ashby Guy-Philippe Goldstein Robin Sloan
Might Intelligent Machines One Day Convince Us It's Time to Die?	Vice Motherboard, 2015	Tim Hwang and Madeleine Clare Elish

Privacy and Harm in a Networked Society

Networked privacy: How teenagers negotiate context in social media	New Media & Society, 2014	Alice Marwick and danah boyd
Big data and due process: Toward a framework to redress predictive privacy harms	Boston College Law Review, 2014	Kate Crawford and Jason Schultz

Data & Human Rights

The Trafficking-Technology Nexus	Social Politics: International Studies in Gender, State & Society, 2014	Jennifer Lynne Musto and danah boyd
Technology and Labor Trafficking in a Network Society: General Overview, Emerging Innovations, and Philippines Case Study	USC Annenberg Center on Communication Leadership & Policy, 2015	Mark Latonero (PI) et al

op-eds

My Experiment Opting Out of Big Data Made Me Look Like a Criminal	Time Magazine, 1 May 2014	Janet Vertesi
To fight trucker fatigue, focus on economics, not electronics	Los Angeles Times, 15 July 2014	Karen Levy
The Dangers of High-Tech Profiling, Using Big Data	New York Times, 7 Aug. 2014	Seeta Peña Gangadharan
Celebrity Nude Photo Hack Exposes Flaw In How We Think About Privacy and the Cloud.	Time Magazine, 2 Sep. 2014	Janet Vertesi
Smartphone Encryption Restores Public Trust in Technology	New York Times, 1 Oct. 2014	Seeta Peña Gangadharan
Forget self-driving cars; we should be focusing on self-driving buses	Quartz, 2 Nov. 2014	Anthony Townsend coauthored with Greg Lindsay
The Problem With Police Body Cameras	Time Magazine, 4 May 2015	Janet Vertesi



book

Networks of New York: An Internet Infrastructure Field Guide	(pictured above)	Ingrid Burrington
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Journalism plays an increasing role in Data & Society's contributions to public understanding of emerging issues. Researchers, fellows, and advisors have been consulted by and quoted in a wide range of outlets, including WNYC's On the Media, Forbes, VICE, BBC, Washington Post, Wired, Wall Street Journal, USA Today, PBS, CBC's Spark, Fast Company, the New York Times, and more.

Output

Several Data & Society people wrote about "Experimental evidence of massive-scale emotional contagion through social networks" (PNAS, 2014) and the public controversy surrounding the study:

Facebook's Emotional Manipulation Study: When Ethical Worlds Collide	Freedom to Tinker, 3 June 2014	Ed Felten
What does the Facebook experiment teach us?	The Message,1 July 2014	danah boyd
Privacy Implications of Social Media Manipulation	Freedom to Tinker, 1 July 2014	Ed Felten
The Test We Can—and Should— Run on Facebook	The Atlantic, 2 July 2014	Kate Crawford
Why Facebook's 'Voter Megaphone' Is the Real Manipulation to Worry About	Techpresident, 3 July 2014	Micah L. Sirfry
Facebook's algorithm—why our assumptions are wrong, and our concerns are right	Culture Digitally, 4 July 2014	Tarelton Gillespie
On the Ethics of A/B Testing	Freedom to Tinker, 8 July 2014	Ed Felten
The Ethics of Experimentation in the IoT	Medium, 23 Oct. 2014	Anthony Townsend

Related:

"Experimental evidence of massive-scale emotional contagion through social networks" coauthor Jeff Hancock spoke about the study and controversy at Data & Society's October 23 Databite.

columns/essays

The Anxieties of Big Data	The New Inquiry, May 30, 2014	Kate Crawford
The Internet's Original Sin	The Atlantic, 14 Aug. 2014	Ethan Zuckerman
Rape Is Not a Data Problem	The Atlantic, 30 Oct. 2014	Karen Levy
When Fitbit Is the Expert Witness	The Atlantic, 19 Nov. 2014	Kate Crawford
"The Cloud" and Other Dangerous Metaphors	The Atlantic, 20 Jan. 2015	Tim Hwang and Karen Levy
The Failed Attempt to Destroy GPS	The Atlantic, 20 Jan. 2015	Ingrid Burrington
Why Using Facebook, Google, And Twitter To Log Into Apps Is A Problem.	Fast Company, 13 Apr. 2015	Baratunde Thurston

Finally, Data & Society community-members have participated in a great number of events over the last year and a half, and in many cases their contributions have been archived online. For links to all Data & Society-related output, visit http://www.datasociety.net/output/.

Board



danah boyd
Founder and President, Data &
Society Research Institute; Principal
Researcher, Microsoft Research;

Researcher, Microsoft Research;
Visiting Professor, New York University

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Anil DashCofounder of ThinkUp and Activate



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Scientist in Residence at Accel Partners



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Author, *How To Be Black*



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Christina XuResearcher, PL Data; Special Projects, Everybody at Once



Ethan ZuckermanDirector, Center for Civic Media, MIT

Staff

Operations



Stacy Abder Management



Eszter CsicsaiCommunity



Ari De Luna Administration



Beth GarrettGrants



Angie Waller Web / Media



Seth Young Operations

Research



Monica Bulger Researcher (Enabling Connected Learning)



Alissa Chisholm Research Analyst (Cities of Data)



Madeleine Clare Elish Research Analyst (Intelligence and Autonomy)



Zachary Gold
Research Analyst
(Data & Human Rights; Enabling
Connected Learning)



Kari Hensley Research Analyst (Data & Fairness; Enabling Connected Learning)



Emily F. Keller
Project Coordinator
(Ethics in "Big Data" Research)



Alexandra Mateescu Research Assistant



Anika Collier Navaroli Project Coordinator (Data & Fairness)



Alex Rosenblat Researcher / Technical Writer



Laura Seago Research Assistant

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Design / Web contractor

Mike Kelly Web contractor

Tamara Kneese Research Assistant

Rebecca Rojer Web / Media contractor

Monica Torres
Research Assistant



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Professor, Department of Informatics; Director Evoke Laboratory, University of California-Irvine (Council for Big Data, Ethics, and Society)



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Privacy Research Fellow, Information Law Institute, New York University (Enabling Connected Learning)



Kate Crawford

Principal Researcher, Microsoft Research; Visiting Professor, MIT Center for Civic Media (Council for Big Data, Ethics, and



Alice Marwick

Assistant Professor, Communication and Media Studies; Director, McGannon Communication Research Center, Fordham University (Privacy and Harm in a Networked Society)



inaugural class of fellows, see pages 30-31 of this report.

Ingrid Burrington

Lani Cossette

Seeta Peña Gangadharan

Tim Hwang

Dean Jansen

David Merritt Johns

Mark Latonero

Karen Levy

Gideon Lichfield

Martha Poon

Bonnie Tijerina

Anthony Townsend



Jake Metcalf

Postdoc, University of California-Irvine (Council for Big Data, Ethics, and Society)

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Center for Media Justice

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White House Office of Science & Technology Policy

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