



PRACTICING ETHICS

in Information Professions

Code4Lib
San Jose, California

Sarah Rice
rice@seneb.com

Bern Irizarry
bern@vlvt.com



Sarah Rice

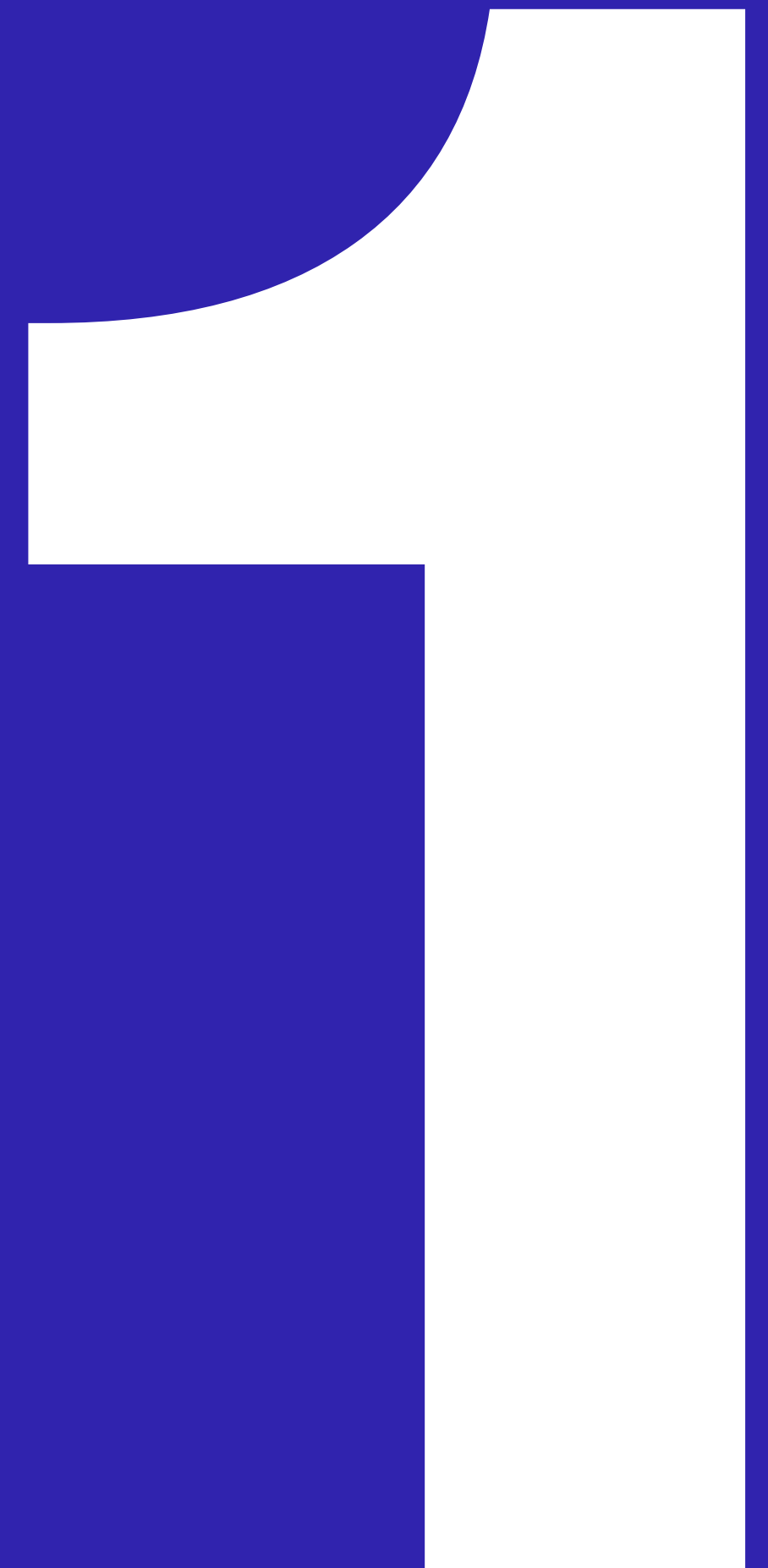
- **23 years as a freelance information architect**
- **Library and Information Science background**
- **Clients include Google, PayPal, Microsoft, eBay, etc.**
- **Work activities include: human-centered design research, user experience design, service design, taxonomy/metadata/system implementation**



Bern Irizarry

- **Founder and principal of design consultancy, Velvet Hammer Design**
- **Over 20 years developing product and services for Fortune 500 and startups**
- **Clients include Sony Pictures, Ace Hardware, and Children's Hospital Los Angeles**
- **Specialties: brand architecture, UX, change management, service design**
- **ALGA Los Angeles Executive, Ladies that UX Los Angeles Co-Founder**

**We Need to
Design & Build
Ethically**



Peter Morville

The Ethics of Information Architecture (2000)

As information architects, we are shaping the collaborative work spaces and social environments of tomorrow. Are we willing to take responsibility for the shapes we shape?

B.J. Fogg

Keynote, IA Summit (2005)

Whether we like it or not, we are all in the business of influencing people's thoughts and behaviors...
The stakes are higher now than ever before.

Vladimir Zwass

Ethical Issues in Information Systems (2010)

[W]e should use ethical principles and codes of ethics to avoid and prevent deleterious effects of technology.

Terence Fenn & Jason Hobbs

Wicked Ethics in Design (2015)

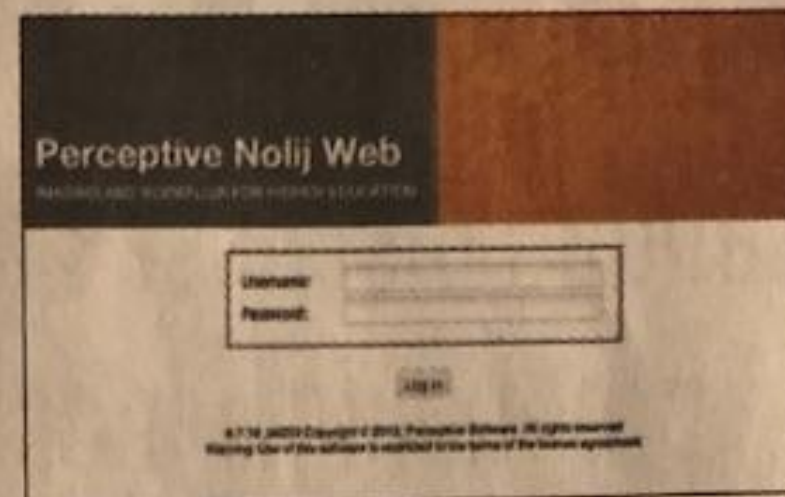
[I]s it possible that a design could be successful but not good?



Student college apps exposed via data breach

Accessible info included ethnicity, criminal status, test scores

By **JULIA INGRAM**
MANAGING EDITOR OF NEWS
HANNAH KNOWLES
SENIOR STAFF WRITER



JULIA INGRAM/The Stanford Daily

Before this week, Stanford students could view the Common Applications and high school transcripts of other students if they first requested to view their own admission documents under the Family Educational Rights and Privacy Act (FERPA).

Accessible documents contained sensitive personal information including, for some students, Social Security numbers. Other obtainable data included students' ethnicity, legacy status, home address, citizenship status, criminal status, standardized test scores, personal essays and whether they applied for financial aid. Official standardized test score reports were also accessible.

Students' documents were not searchable by name, but were instead made accessible by changing a numeric ID in a URL.

A Stanford student who recently submitted a FERPA request for their admissions documents discovered the vulnerability in a third-party content management system called NoliqWeb that the University has used since 2009 to host scanned files. Since 2015, students who have submitted FERPA requests have been able to view files through NoliqWeb.

Between Jan. 28 and 29, the student briefly accessed 81 students' records

A vulnerability in the third-party content management system, NoliqWeb, that Stanford uses to store students' admissions files, allowed students to access the records of others.

student who disclosed the breach to The Daily was granted anonymity to protect them from potential legal repercussions for accessing private information while investigating the security flaw.

Stanford will notify the 93 students whose privacy was compromised because of this flaw.

"We regret this vulnerability in our system and apologize to those whose records were inappropriately viewed," Hayward wrote in an email to The Daily. "We have worked to remedy the situation as quickly as possible and will continue working to better protect our systems and data."

Stanford has also notified Noliq's parent company Hyland Software of the vulnerability. Hyland acquired Noliq in 2017 and announced on Dec. 31, 2017 that it would be discontinuing the NoliqWeb product. While Stanford University Information Technology (UIT) intends to finish implementing a new platform to replace the NoliqWeb sys-

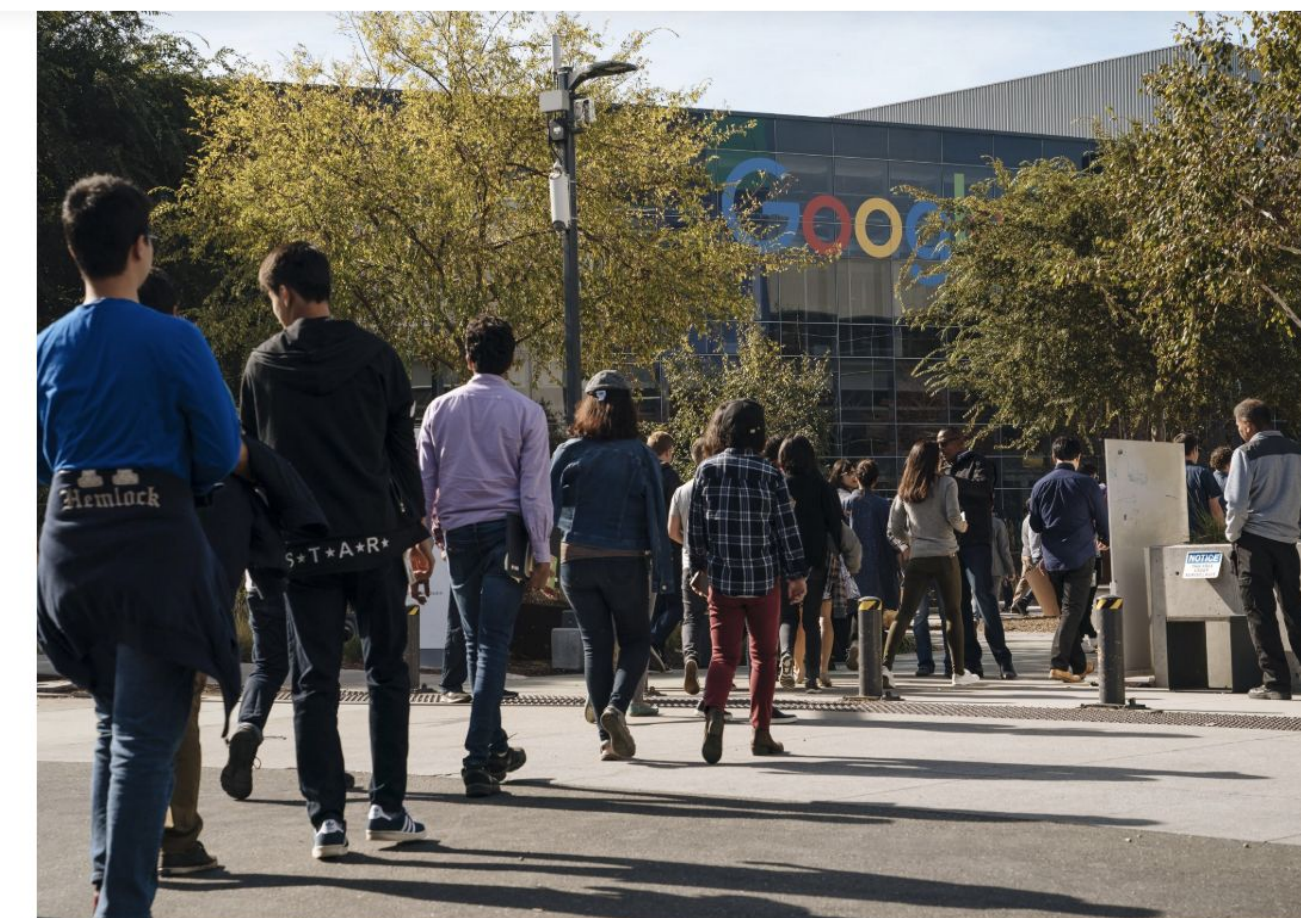
MEMBER FEATURE STORY

Google Workers Lost a Leader, But the Fight Will Continue

Liz Fong-Jones explains why she left, and the future of tech worker activism, in a new op-ed



Liz Fong-Jones [Follow](#)
Feb 13 · 7 min read ★



Credit: Mason Trinca / Stringer/Getty Images



8.6K




I quit Google this January. It was a bittersweet moment—I joined 11 years ago as a college dropout and ultimately emerged as a prominent figure in the field of Site Reliability Engineering. My work had impact, I liked my team, and Google had given me so much over my career. But I couldn't continue working there.

I have grave concerns about how strategic decisions are made at Google today, and who is missing a seat at the bargaining table. Google bears the responsibility of being one of the most influential companies in the world, but it has misused its power to place profits above the well-being of people. Executives seem to have forgotten the ethos of the company's earliest employees—"don't be evil"—and ethical stances, such as pulling out of China over censorship concerns in 2010, have been supplanted by shadowy efforts to appease the country's government at the expense of human rights.

The approaches that I used during my time at Google to advocate for vulnerable people, including women, people of color, and LGBT+ people, have become less effective as leadership repeatedly stonewalls employees who privately raise concerns. Google will need to fundamentally change how it is run in order to win back the trust of workers and prevent a catastrophic loss of long-tenured employees, especially those from vulnerable groups.

I first raised my voice on behalf of users in January 2010, less than two years into my run at the company. I'd taken to heart the Google handbooks containing phrases such as "focus on the user, and all else will follow," and "don't be evil; if you see something that you think isn't right—speak up!"

I, along with many peers, predicted that without significant product changes,



The creation will always
carry its maker's name.
And outlive him [or her].

Mike Monteiro
Design's Lost Generation (2018)

**We're Working
on Tools for
Ethical Design**



mobile society
←-----→

Classical

Contemporary

paradigm

disembodied
postmodernist
digital

embodied
digi modernist
post digital
processual

theories

library + information
science
graphic + visual design
computer science

architecture
systems thinking
cognitive science

practice

websites
software applications

complex systems
cross-channel experiences
ecosystems



Academics' and Practitioners' Roundtable
iaroundtable.org

SCENARIO CREATION TOOL (FOR ETHICAL DESIGN)

USE CASE →

A SPECIFIC PROBLEM OR ISSUE THAT REQUIRES A DESIGN SOLUTION.

ACTORS →

ALL ENTITIES AFFECTED BY THE USE CASE

IN ORDER:

1. COMMUNITY

2. STAKEHOLDERS

3. ACTORS

USE CASE

VALUE #1 VALUE #2 VALUE #3 VALUE #n

1. ACTOR: COMMUNITY

2. STAKEHOLDERS

3. ACTORS

4. SYNTHESIS

WHAT IF?

◦ HYPOTHESIZE

◦ DESIGN

◦ TEST

VALUES

IDEAS THAT GUIDE US IN ACTION (WE USED RICHARD MASON'S PAPA MODEL BUT YOU CAN CHOOSE YOUR OWN)

ANSWER THE ?'S:
◦ HOW DO I KNOW I AM DESIGNING ETHICALLY?
◦ IS THERE / WHAT IS THE HARM?

TRY IT OUT WITH ONE OF THESE USE CASES OR ONE OF YOUR OWN →

LEGEND

↓ VERTICAL (VALUE)

→ HORIZONTAL (ACTOR)

TRY A USE CASE USING RICHARD MASON'S VALUES
PAPA MODEL
PROPERTY OF
ACCESS

The Ethics Canvas





Scenarios

A - ALGORITHM BIAS

Your team is tasked with working with a search algorithm team to better understand how bias shows up in its algorithms and to suggest ways it can improve and correct that bias. Most of the engineers rely heavily on what they consider to be objective measures and assert that this means their work is neutral and that some other cause is making the search results appear biased.

How do you address individuals' adoption of responsibility for their contribution to bias? What is the role of the information professional in combating systemic information bias like this?

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ETHICS CANVAS

A DESIGN TOOL FOR INFORMATION PROFESSIONALS

1 Is this an ethical dilemma?

Circle "Yes" or "No" for each question. A "Yes" to any questions means continue to the next section.

Could you or someone suffer **physical harm**? Yes / No

Could you or someone suffer **emotional injury**? Yes / No

Could this damage your or your organization's **reputation**? Yes / No

Could this damage your or your organization's **relationships**? Yes / No

Could this hinder achievement of your personal or **organizational goals**? Yes / No

2 What Are Your Project/Initiative Goals?

What must be achieved with your project? Are there underlying beliefs, rumors, past experiences for stakeholders that could impact your efforts or require change management mitigation?

Facts

What do we know about the initiative/solution?

• e.g. Solution needs to collect PII

• e.g. Needs to meet ADA requirements

Perceptions

What people appear to think/believe

• e.g. Sales need to hit its numbers

• e.g. We are about to be regulated

3 Who is involved or can be impacted?

List all the groups that can be impacted by your solution. Remember, go broad here. You can always reassess or group into categories later. (e.g. Community, Stakeholders, Shareholders, Departments)

• ALGORITHM TEAM

• STAKEHOLDERS WHO ASKED FOR ALGORITHM IN FIRST PLACE

• USERS

4 What values or frameworks exist?

Identify what values and guiding principles govern your work. This can be informed by organizational values, industry ethics guidelines you adhere to or personal values you bring to your work. (List 8-10)

• ARTICULATE SOCIAL RESPONSIBILITIES of neighbors...

• CONTRIBUTE TO SOCIETY & HUMAN WELL-BEING

• GIVE BETTER & SMARTER POLICIES THAT SUPPORT PROTECT THE DIGNITY OF ALL USERS & OTHERS

• ADDRESS BY A COMPUTING SYSTEM/SYSTEMS

• GIVE COMPREHENSIVE & THOROUGH EVALUATION OF GOVERNANCE +

• COMPUTER SYSTEMS & THEIR IMPACTS, INCLUDING ANALYSIS OF POSSIBLE RISKS

Title:

Creator:

Date:

5 Situation Summary

Provide a brief overview, no more than 2 or 3 sentences that outlines the ethical dilemma and project context.

[Empty text box for Situation Summary]

6 Impacts

What potential impacts might the product or system you are creating have on each individual or constituency. How does adhering to the value, mitigate or amplify that effect on people?

VALUES & GUIDING PRINCIPLES

Select your top values and principles from Section 4. These are lenses you will use to evaluate how your program or product could impact individuals or groups.

Value: []

Value: []

Value: []

IMPACTED INDIVIDUALS OR GROUPS

Select the groups you want to focus on from the Impacted section.

Group 1:	Impact(s):	Impact(s):	Impact(s):
[]	[]	[]	[]
Group 2:	Impact(s):	Impact(s):	Impact(s):
[]	[]	[]	[]
Group 3:	Impact(s):	Impact(s):	Impact(s):
[]	[]	[]	[]
Group 4:	Impact(s):	Impact(s):	Impact(s):
[]	[]	[]	[]

7 Synthesize and Solution

Synthesize the impacts across your impacted groups. What common themes do you see? Look at your impact map in Section 6.

+ Benefits
What are the positive impacts of this solution?

- List the positive impacts you saw affecting your groups
- What can be done to amplify these results?

- Harms
What are the negative impacts of this solution?

- List the negative impacts you saw affecting your groups
- What can be done to mitigate these results?

Need More Research
What areas do you need to explore further?

- List the areas you identified as needed to explore further to understand
- What kind of experiments might you be able to in these areas?

8 What is your action plan?

Based on the synthesize above, brainstorm the action items you can take as next steps.

[Empty text box for Action Plan]

Code4Lib 2019
Ethics for Information Professionals



Scenarios

A - ALGORITHM BIAS

Your team is tasked with working with a search algorithm team to better understand how bias shows up in its algorithms and to suggest ways it can improve and correct that bias. Most of the engineers rely heavily on what they consider to be objective measures and assert that this means their work is neutral, and that some other cause is making the search results appear biased.

How do you address individuals' abnegation of responsibility for their contribution to bias? What is the role of the information professional in combating systemic information issues like this? ¹

B - PERSONAL DATA

A firm has a policy of allowing employees to use their computers, which were the property of the company, for personal purposes, including e-mail and web access. When a possible acquisition of the company by another one was announced, a rising employee unrest was suspected. The president of the company ordered the data department to monitor all the computer activities of the employees, including gathering and organizing the contents of their memos, e-mail messages, budgets in preparation, and so forth. Information professionals in the data department constructed a dashboard and report that detailed employees' activity both during work and during private use of their computers. The monitoring and reporting was done without employees' knowledge.

Was the action of the company management ethical or unethical in allowing personal use of company computers by employees? How about the president's monitoring decision?

¹ Written by Sarah A. Rice, 2018.

3 Who is involved or can be impacted?

List all the groups that can be impacted by your solution. Remember, go broad here. You can always reassess or group into categories later. (e.g. Community, Stakeholders, Shareholders, Departments)

4 What values or frameworks exist?

Identify what values and guiding principles govern your work. This can be informed by organizational values, industry ethics guidelines you adhere to or personal values you bring to your work. (List 8-10)

Handwritten notes:
by President
employees
information professionals
company management

Handwritten notes:
Group 3:
Employees
Impact(s):
- No opportunity to learn about tech used & how
Impact(s):
- Needs are not met
Impact(s):
- Mistrust of employees & management

Handwritten notes:
+ B
What are the positive impacts you saw affecting a policy of not making e to amplify these results

Handwritten notes:
What are the negative impacts you saw affecting that is a way to handle employee needs to mitigate these create a more context

Handwritten notes:
What areas you identified as needs

Handwritten notes:
d of experiments might

6

Impacts

What potential impacts might the product or system you are creating have on each individual or constituency. How does adhering to the value, mitigate or amplify that effect on people?

VALUES & GUIDING PRINCIPLES

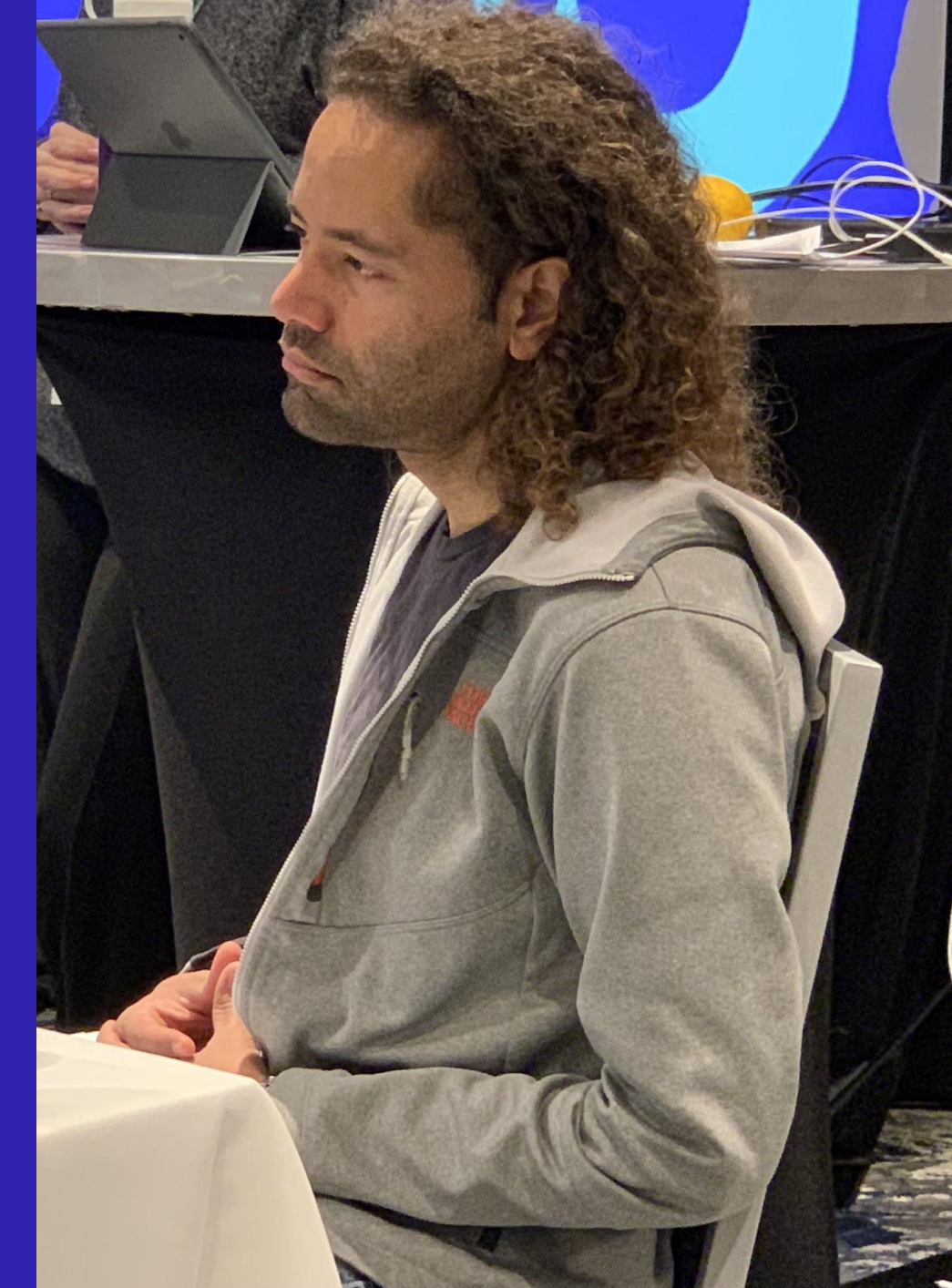
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Value: <input type="text"/>	Value: <input type="text"/>	Value: <input type="text"/>
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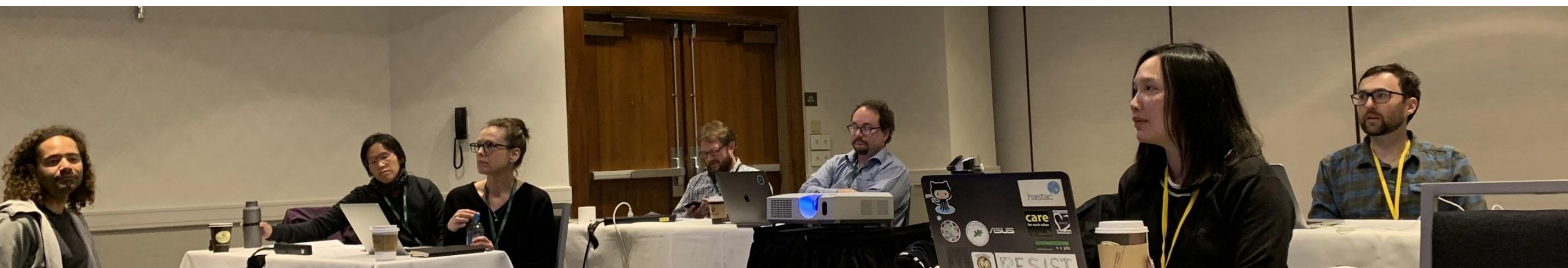
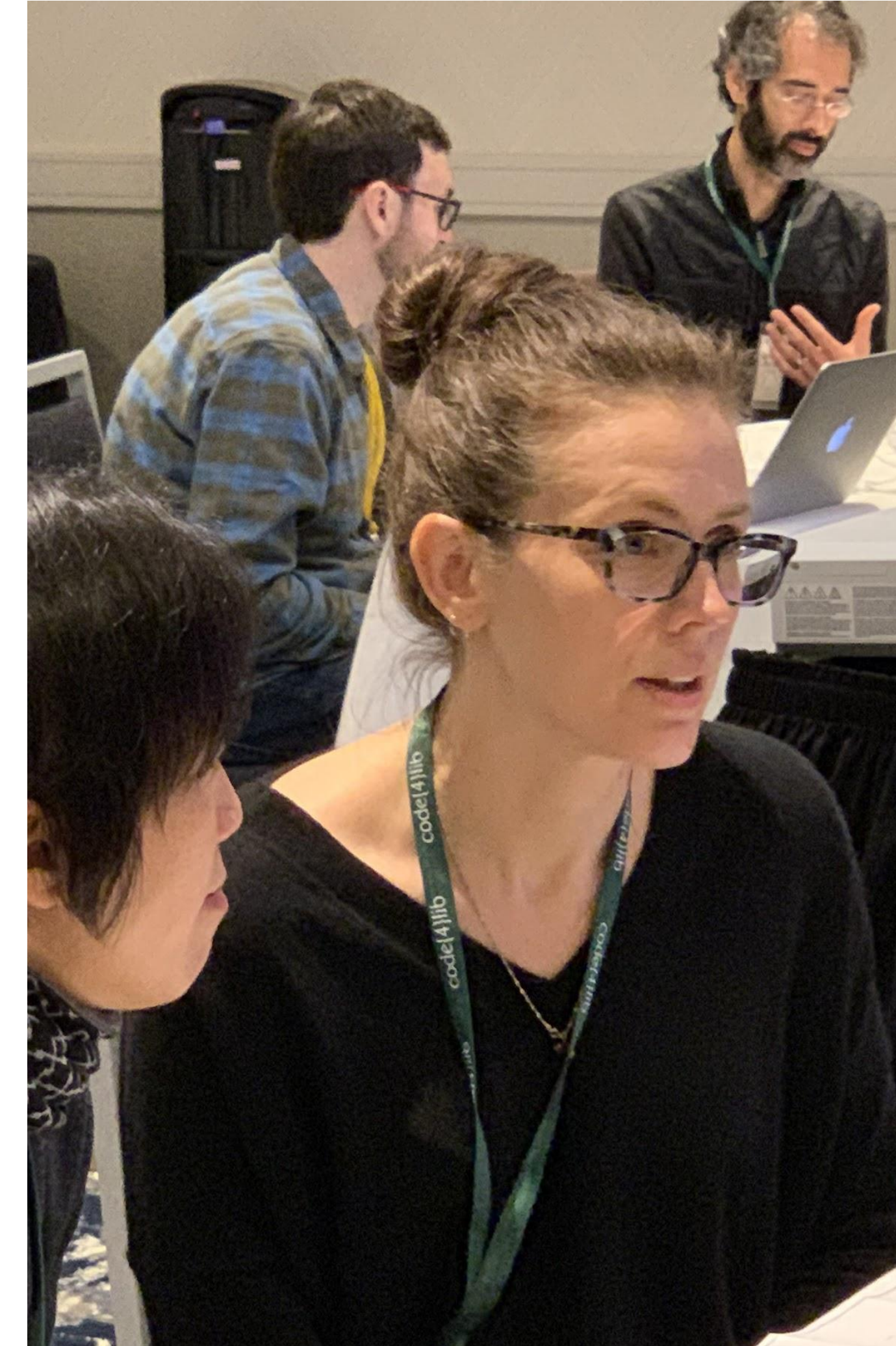
Group 1: <input type="text"/>	Impact(s):	Impact(s):	Impact(s):
Group 2: <input type="text"/>	Impact(s):	Impact(s):	Impact(s):
Group 3: <input type="text"/>	Impact(s):	Impact(s):	Impact(s):
Group 4: <input type="text"/>	Impact(s):	Impact(s):	Impact(s):



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WORKSHOP

Participants have given express permission for their images to be used in this presentation.



Using the Ethics Canvas



OTHER USES

Use on a current project, product or initiative

- **During design/planning phase**
- **When a problem arises, to focus your efforts**

Use with fictitious scenarios to

- **have a conversation about ethics, but stay on neutral topics**
- **flesh out an ethical framework or principles that your organization can use**

Questions



Diversity & Inclusion Roundtable

Information Architecture Conference

Orlando, FL

March 13-14, 2019

iaroundtable.org



RESOURCES

Ethics and Information Architecture

<http://iaroundtable.org/2018.html>

*** Code4Lib Presentation & Ethics Canvas**

<http://www.iaroundtable.org/code4lib>

Information Architecture Conference

March 13 – 17, 2019

Orlando, FL

<http://www.theiaconference.com/>

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Thanks!

Sarah Rice
rice@seneb.com

Bern Irizarry
bern@vlvt.com