

Engaging the Margins

Start of Block: Captcha

Before proceeding to the survey, please complete the captcha below.

End of Block: Captcha

Start of Block: Study Information and Consent

Thank you for your interest in participating in our study! This online survey, which takes approximately 20 minutes to complete, asks about your experiences building and using technology, with a focus on engagement with individuals who identify as Black, Indigenous, or People of Color (BIPOC) in technological spaces and datasets. Participation in this study is voluntary, and you will not be penalized if you decide not to take part in the study or if you quit the study later. There will be no direct benefits for participation. However, insights from this research can indirectly benefit the tools software developers use in practice. We will compensate each survey respondent that completes the survey in its entirety (with valid responses) with a \$10 electronic gift card. In the study consent form, you will be given information regarding participation in this study. Please read carefully to determine if you would like to consent to participation.

I have read this form, all of my questions have been answered by the research staff, and I agree to participate in this study.

I agree (1)

I disagree (2)

End of Block: Study Information and Consent

Start of Block: Contributing Data

Constantly in a state of production and analysis, data is a comprehensive means of measurement. **Data is information about the world around us (i.e., our lived experiences).** Data assigns a value to facts which, once contextualized, become information to describe our world. In its raw form, data can be statistics, numbers, and graphs that can reflect anything from the climate to the stock market. Data can also be much more personal—nearly every interaction

you have in the digital world is recorded as data and may later become information to report your online habits and preferences. For our research purposes, data means any value that has the power to describe and inform a particular aspect of our world. This section will ask you questions about where and how you are contributing your data.

Which of the following devices do you own? *Select all that apply.*

- Cell phone (1)
 - Tablet (2)
 - Laptop (3)
 - Personal computer (4)
 - Assistive technologies (e.g., screen readers, wheelchairs) (5)
 - Other: (6) _____
-

Please select 'Strongly disagree' from the list below.

- Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
-

Do you have access to broadband internet at home (For broadband information, please refer to <https://www.highspeedinternet.com/resources/what-is-broadband>)

Yes (1)

No (2)

Do you have access to wireless internet at home?

Yes (1)

No (2)

Which of the following types of artifacts do you consider to be data in a digital setting? *Select all that apply.*

- Demographic data (e.g., age, gender, or race) (1)
 - Social media posts (creation of content, e.g. videos, pictures, memes, tweets, etc) (2)
 - Social media engagement (interaction with others' content through likes, retweets, replies, etc.) (3)
 - Online knowledge sharing community posts (e.g., posting on Q&A sites like StackOverflow or Quora) (4)
 - Online knowledge sharing community engagement (e.g., upvoting comments) (5)
 - Public reviews (e.g., Yelp or Google) (6)
 - Other(s): (7) _____
-

What types of practices do you have as it relates to contributing or providing your data? *Select all that apply.*

- Read consent forms prior to signing (1)
- Read disclosure forms (e.g., privacy agreements, terms and conditions) (2)
- Research the platform or organization to which you'll be providing the data (3)
- Ask others (e.g., friends or coworkers) about it (4)
- Other: (5) _____

What experiences or knowledge informed your current information sharing practices?

To what extent are you **aware of** the following:

	I am not aware of my contributions being accessed and used by researchers. (1)	I am aware of the potential for my contributions to be accessed and used by researchers. (2)	I am aware of the fact that my contributions are being accessed and used by researchers. (3)
The data you contribute when engaging with technology may be accessed and used by <i>researchers without your explicit knowledge or permission.</i> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The data you contribute when engaging with technology may be accessed and used by <i>for-profit companies without your explicit knowledge or permission.</i> (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent are you **comfortable** are you with each of the following:

	Very uncomfortable (1)	Somewhat uncomfortable (2)	Neither comfortable nor uncomfortable (3)	Somewhat comfortable (4)	Very comfortable (5)
Your data being accessed and used by <i>researchers with your explicit knowledge and permission.</i> (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your data being accessed and used by <i>for-profit companies with your explicit knowledge and permission.</i> (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your data being accessed and used by <i>researchers without your explicit knowledge and permission.</i> (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your data being accessed and used by <i>for-profit companies without your</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

explicit
knowledge
and
permission.
(4)

Which factors contribute to your comfort with your data being accessed and used *with* your explicit knowledge and permission? *Select all that apply.*

- Trust in the source or organization collecting the data (1)
 - Familiarity with the source or organization collecting the data (2)
 - Transparency regarding data collection, analysis, and outcomes (3)
 - Efforts to explicitly acquire consent, including how specifically the data will be used, at some point prior to using your data (4)
 - Not applicable—I am not comfortable with this. (5)
 - Other: (6) _____
-

Which factors contribute to your comfort with your data being accessed and used *without* your explicit knowledge and permission? *Select all that apply.*

- Trust in the source or organization collecting the data (1)
 - Familiarity with the source or organization collecting the data (2)
 - Transparency regarding data collection, analysis, and outcomes (3)
 - Efforts to explicitly acquire consent, including how specifically the data will be used, at some point prior to using your data (4)
 - Not applicable—I am not comfortable with this. (5)
 - Other: (6) _____
-

Which of the following types of data have you **ever** contributed, either online or to someone else? *Select all that apply.*

- Demographic data (1)
- Social media posts (creation of content, e.g., videos, pictures, memes, tweets, etc.) (2)
- Social media engagement (interaction with others' content through likes, retweets, replies, etc.) (3)
- Online knowledge sharing community posts (e.g., posting on Q&A sites like StackOverflow or Quora) (4)
- Online knowledge sharing community engagement (e.g., upvoting posts or comments) (5)
- Online advertisements (6)
- Short internet polls (e.g. completion of polls for content access) (7)
- Public reviews (e.g., Yelp or Google) (8)
- Research participation (e.g., surveys or interviews) (9)
- Other(s): (10) _____

In the past year, which of the following types of data have you **ever** contributed either online or to someone else? *Select all that apply.*

- Demographic data (1)
 - Social media posts (creation of content, e.g. videos, pictures, memes, tweets, etc.) (2)
 - Social media engagement (interaction with others' content through likes, retweets, replies, etc.) (3)
 - Online knowledge sharing community posts (e.g., posting on Q&A sites like StackOverflow or Quora) (4)
 - Online knowledge sharing community engagement (e.g., upvoting posts or comments) (5)
 - Online advertisements (6)
 - Short internet polls (e.g completion of polls for content access) (7)
 - Public reviews (e.g., Yelp or Google) (8)
 - Research participation (e.g., surveys or interviews) (9)
 - Other(s): (10) _____
-

In which of the following interactions have you **ever** contributed data? *Select all that apply.*

- Facebook posts or engagement (1)
 - Twitter posts or engagement (2)
 - Tiktok posts or engagement (3)
 - Instagram posts or engagement (4)
 - StackOverflow posts or engagement (5)
 - Reddit posts or engagement (6)
 - HackerNews posts or engagement (7)
 - LinkedIn posts or engagement (8)
 - Survey or interview completion (9)
 - Other(s): (10) _____
-

In which ways do you **most frequently** contribute data? *Select all that apply.*

- Facebook posts or engagement (1)
 - Twitter posts or engagement (2)
 - Tiktok posts or engagement (3)
 - Instagram posts or engagement (4)
 - StackOverflow posts or engagement (5)
 - Reddit posts or engagement (6)
 - HackerNews posts or engagement (7)
 - LinkedIn posts or engagement (8)
 - Survey or interview completion (9)
 - Other(s): (10) _____
-

On which of the following kinds of devices do you contribute your data? *Select all that apply.*

- Cell phone (1)
 - Tablet (2)
 - Laptop (3)
 - Personal computer (4)
 - Assistive devices (e.g., screen readers, wheelchairs) (5)
 - Other: (6) _____
-

Which factors contribute the **most** to your decision to contribute your data?

- Trust in the platform, company, or person collecting data (1)
 - Familiarity with the platform or person collecting data (2)
 - Word of mouth (3)
 - Availability of clear instructions for engagement and data use (4)
 - Easy to find and parse privacy and security practices (5)
 - Low risk for impact to safety or personal well-being (6)
 - Other(s): (7) _____
-

What would be helpful to know about your data and where it has been contributed? *(e.g., knowing when your online data is being actively used for research or development)*

End of Block: Contributing Data

Start of Block: Seeking Data

This next section will ask you questions about if and where you seek data.

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Have you previously had to find or collect data (e.g., public datasets or private data sources) to support technical work (e.g., research and/or development)?

- Yes (1)
 - No (2)
-

Do you collect and use data for research or technology development? *Select all that apply.*

- Research (1)
 - Technology Development (2)
 - Other: (3) _____
-

Have you ever paid for data?

- Yes (1)
 - No (2)
-

How important is it for your work to have diversity in a given dataset (existing or one you have curated)?

- Very important (1)
 - Kind of important (2)
 - Not very important (3)
 - Not important at all (4)
-

What efforts have you made to find diverse data?

Which of the following kinds of datasets do you most frequently engage with?

- Structured (e.g.,) (1)
 - Unstructured (e.g.,) (2)
 - A combination of both (3)
-

Page Break

What kinds of datasets do you find yourself searching for the most? *Select all that apply.*

- Community data (e.g., police data) (1)
 - Developer data (e.g., GitHub) (2)
 - National/government data (e.g. CENSUS) (3)
 - Social media data (e.g., Twitter) (4)
 - Other: (5) _____
-

Where do you typically begin your search for datasets? *Select all that apply.*

- General web search (e.g., Google or Bing) (1)
 - Local or national databases (e.g., census.gov) (2)
 - Academic databases (e.g., UCI Machine Learning Repository) (3)
 - Data hubs (e.g., Kaggle) (4)
 - Other(s): (5) _____
-

Where do you typically have the highest success rate when searching for datasets?

- General web search (e.g., Google or Bing) (1)
 - Local or national databases (e.g., census.gov) (2)
 - Academic databases (e.g., UCI Machine Learning Repository) (3)
 - Data hubs (e.g., Kaggle) (4)
 - Other(s): (5) _____
-
-

In what ways do you use the data you collect?

What factors contribute the **most** to your decision to use a data set? *Select all that apply.*

- Amount of data in the dataset (1)
 - Trust in the source (2)
 - Familiarity with the source (3)
 - Peer recommendation (4)
 - Availability of clear documentation for use (5)
 - Other(s): (6) _____
-
-

What factors contribute the **least** to your decision to use a data set? *Select all that apply.*

- Amount of data in the dataset (1)
 - Trust in the source (2)
 - Familiarity with the source (3)
 - Peer recommendation (4)
 - Availability of clear documentation for use (5)
 - Other(s): (6) _____
-

How often are you **unable** to find adequate data for a given task or project?

- All the time (1)
 - Frequently (2)
 - Not very often (3)
 - Never (4)
-

How would you describe your experience finding trustworthy resources for adequate, representative data sets?

- Extremely difficult (1)
- Somewhat difficult (2)
- Neither easy nor difficult (3)
- Somewhat easy (4)
- Extremely easy (5)

What, if anything, impacts your ability to seek and collect diverse datasets?

- Resources (e.g., money, data sources) (1)
 - Tooling (e.g, language support) (2)
 - Infrastructure (e.g., memory, RAM) (3)
 - Other (4)
-

What methods have you tried to address or mitigate representation imbalances in the datasets you find and/or use?

- Data resampling (1)
 - Find more or new datasets (2)
 - Create my own dataset (6)
 - Automated tooling (e.g., data pre-processing) (3)
 - I don't (I use what I can find, regardless) (4)
 - Other (5) _____
-

Page Break _____

Is there anything else you'd like to share regarding your experiences (positive or negative) seeking and collecting datasets?

What factors contribute to your trust in a data resource?

End of Block: Seeking Data

Start of Block: Collecting Data (Research)

This next section will ask you questions about your practices as a researcher collecting data in online settings.

Do you conduct research that requires the collection and analysis of data?

- Yes (1)
 - No (2)
-

Does your research engage with historically marginalized groups or communities?

- Yes (1)
 - No (2)
-

Does your research center or focus on historically marginalized groups or communities?

- Yes (1)
- No (2)

What are the typical methods of data collection in your research? *Select all that apply*

- Surveys (1)
 - Interviews or user studies (2)
 - Focus groups or workshops (3)
 - Data mining from online communities (e.g., GitHub) (4)
 - Platform API (e.g., Twitter) (5)
 - Web scraping (6)
 - Other: (7) _____
-

Do you acquire consent in some form when collecting and using existing data (e.g., online platform engagement, webscraping, data mining, etc.)?

- Yes (1)
 - No (2)
-

In what ways have you attempted to acquire consent when collecting data from publicly available or existing data?

Do you acquire consent in some form when collecting and using prospective data (e.g., interviews or surveys)?

Yes (1)

No (2)

Have you used online social platforms, such as Facebook and Reddit, to advertise your research and find participants?

Yes (1)

No (2)

What online social platforms do you typically advertise on? *Select all that apply.*

Facebook (1)

Twitter (2)

Tiktok (3)

Instagram (4)

Reddit (5)

HackerNews (6)

LinkedIn (7)

Other: (8) _____

Do you recruit participants for research using your own network or contacts?

- Yes (1)
 - No (2)
-

Do you use email lists to advertise and recruit participants?

- Yes (1)
 - No (2)
-

How successful would you say your current research methods have been in recruiting research participants from underrepresented and historically marginalized groups?

- Very successful (1)
 - Somewhat successful (2)
 - Not very successful (3)
 - Not successful at all (4)
 - I'm not sure (5)
-

What methods do you currently use find and recruit research participants from underrepresented and historically marginalized groups?

- Advertise through personal contacts (1)
- Advertise in physical locations where target group(s) may be located (5)
- Target social/online platforms designed specifically for target group(s) (2)
- I'm not sure (3)
- I use the same methods to recruit participants for all studies (6)
- Other (4) _____

Please include the email lists or groups you frequently use for advertising your research, if any (e.g., Black design slack groups, software development listservs, etc.). Note: we are looking for descriptions of the lists or groups, not the specific web address information.

Where do most of your participants come from? *Select all that apply.*

- Not sure (1)
- My contact network (2)
- Email lists (3)
- Facebook (4)
- X (formerly known as Twitter) (5)
- Tiktok (6)
- Instagram (7)
- Reddit (8)
- HackerNews (9)
- LinkedIn (10)
- Recruitment support sites (i.e. Qualtrics Research Panels) (11)
- Other: (12) _____

End of Block: Collecting Data (Research)

Start of Block: Demographics

Do you identify as a Person of Color?

- Yes (1)
- No (2)

You may belong to one or more of the racial or cultural groups on the following list. Which one(s) are you? *Mark up to 6 responses.*

- Arab (1)
- Black (2)
- Chinese (3)
- Filipino (4)
- Indigenous (5)
- Japanese (6)
- Korean (7)
- Latin American (8)
- Native Hawaiian or Other Pacific Islander (9)
- Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian) (10)
- South Asian (e.g., East Indian, Pakistani, Sri Lankan) (11)
- West Asian (e.g., Iranian, Afghan) (12)
- White (13)
- Do not know (14)
- Prefer not to say (15)
- Other (16) _____

What is your age group?

- Under 18 (1)
 - 18 - 24 (2)
 - 25 - 34 (3)
 - 35 - 44 (4)
 - 45 - 54 (5)
 - 55 - 64 (6)
 - 65 - 74 (7)
 - 75 - 84 (8)
 - 85 or older (9)
-

What gender do you identify as?

- Cisgender female (1)
 - Cisgender male (2)
 - Non-binary (3)
 - Transgender female (4)
 - Transgender male (5)
 - Prefer not to say (6)
 - Other: (7) _____
-

What is your sexual orientation?

- Bisexual (1)
 - Gay (2)
 - Heterosexual or straight (3)
 - Lesbian (4)
 - Pansexual (5)
 - Intersex (6)
 - Queer (7)
 - Prefer not to say (8)
 - Other: _____
-

What is your first (native) language?

- Arabic (1)
 - Cantonese (2)
 - English (3)
 - French (4)
 - Hindi (5)
 - Mandarin (6)
 - Portuguese (7)
 - Spanish (8)
 - Swahili (9)
 - Prefer not to say (10)
 - Other: (11) _____
-

What is your immigration history?

- Immigrant (1)
 - First generation (2)
 - Multi-generation (3)
 - Indigenous (4)
 - Prefer not to say (5)
-

Are you blind, or do you have serious difficulty seeing, even when wearing glasses?

Yes (1)

No (2)

Maybe (3)

Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?

Yes (1)

No (2)

Do you have serious difficulty walking or climbing stairs without assistance?

Yes (1)

No (2)

What is your current occupation?

- Software developer/engineer (1)
 - Data scientist (2)
 - Project manager (3)
 - Industry researcher (4)
 - K-12 educator (5)
 - Tenure track faculty (6)
 - Term faculty (7)
 - Adjunct faculty (8)
 - Lecturer (9)
 - Healthcare worker (10)
 - Childcare worker (11)
 - Other: (12) _____
-
-

*

How long have you been working in your current occupation (in years)?

How often do you engage with technology in *professional settings* (e.g., your devices)?

- Every day (1)
 - A few times a week (2)
 - A few times a month (3)
 - Rarely (4)
 - Never (5)
-

How often do you engage with technology in *personal settings* (e.g., your devices)?

- Every day (1)
 - A few times a week (2)
 - A few times a month (3)
 - Rarely (4)
 - Never (5)
-

What is your highest level of education?

- No schooling completed (1)
- School to 8th grade (2)
- Some high school, no diploma (3)
- High school graduate, diploma or the equivalent (for example: GED) (4)
- Some college credit, no degree (5)
- Trade/technical/vocational training (6)
- Associate degree (7)
- Bachelor's degree (8)
- Master's degree (9)
- Professional degree (e.g., MBA) (10)
- Doctorate degree (11)
- Other: (12) _____

End of Block: Demographics

Start of Block: Compensation and Future Research Participation

To receive your compensation for participation, please provide your email address below. You will also be given the opportunity to opt in for future research studies relevant to this survey. If you do not opt in for future research, we will destroy your email address following compensation.

Please provide the best email address for sending your \$10 Amazon gift card:

Would you be interested in participating in our future studies on data and technology (e.g., interviews)?

Yes (1)

No (2)

Maybe (3)

Where did you find out about this research?

At a public library (1)

Through a relevant tech organization (e.g., Mission Capital) (2)

Word of mouth (e.g., personal contact) (3)

Social media (e.g., Twitter) (5)

Other (4) _____

End of Block: Compensation and Future Research Participation
