NIPS 2018 Inclusion Survey: Executive Summary

We report the results of a survey conducted from August–October 2018 on demographics & inclusion in the NIPS community. At analysis, 2375 people participated; the range of responses is vast. Here, we attempt to capture the key themes, with pointers to where more information can be found. Such a summary runs the risk of ignoring concerns of some members; we encourage all interested to read the full report. The below concerns are listed arbitrarily; there is no implied priority. At the NIPS 2018 conference, during the lunch period on Tuesday, there will be a moderated and guided townhall; one goal is to develop action items to improve the level of respect and inclusion at the conference. Thank you to *all* participants.

Representation, Respect and Awareness of Others: The environment at the conference is one in which many have experienced harassment, bullying, microaggressions, or lack of respect as a result of: their gender (2.3.a, 2.3.b, 2.7.l); their sexual orientation or gender identity (2.3.b); their race, ethnicity or religion (2.4.b, 2.7.h); their native language (2.4.a, 2.4.b); their political views (in particular, an assumption that everyone is left-leaning: 2.7.i); or their disability status (2.5). Experiences of sexual harassment in particular, and a lack of acknowledgment of these problems by the organizers (and therefore a perception that the conference condones such behavior), is a recurring theme (2.3.a, 2.7.m). These problems are exacerbated by the underrepresentation of women (2.3.c), queer (2.3.a, 2.3.c, 2.7.k), and minority (2.4.a) attendees; this occurs both in attendance and in organizational structure (2.4.a). Some specific issues that were raised with the goal of increasing awareness of needs of others: generally improved respectfulness for all attendees (2.7.k), suggestions for how to make talks more accessible to colorblind attendees (2.5.b), or attendees from non-English-speaking countries (2.4.d).

Community Openness: The conference can have a closed and elitist feeling to newcomers, especially those from labs or jobs perceived as non-standard within NIPS (2.2.b), and those who work in different areas of science or work on non-trendy topics (2.2.e, 2.7.e). There is a perceived bias toward researchers and labs in the U.S. in the conference and in reviewing (2.4.c), particularly when authors are non-native English speakers (2.4.a). The lack of openness makes it difficult for newcomers and junior researchers to network (2.7.a, 2.7.g), a problem which is exacerbated by non-inclusive corporate events (2.7.b), and by a lack of transparency regarding how the conference runs and is organized (2.7.m).

Conference Logistics: Specific logistical choices around how the conference is run have led to difficulties in participating fully for many. Loud, crowded poster sessions create challenges for those who have difficulty standing for long periods, and those with claustrophobia or hearing loss (2.5.a). Additional issues with evening corporate parties include substantial difficulties for newcomers, those from outside the US, those who do not consume alcohol, in addition to harassment that has occurred there (2.2.c, 2.7.b). Catered food arose as an issue for people, with health reasons (2.5.c), and religious or personal reasons (2.7.f) for maintaining a particular diet. Other religious issues include difficulties finding places to pray (2.7.h). There are several issues parents face, such as a need for broad childcare support (2.6.b), challenges with evening events like posters and parties (2.6.c), and the overall choice of the dates of the conference (2.7.f); the last of which also impacts educators (2.2.f). Registration was a large problem this year, which impacted people based on where they live and their time zone (2.7.d), and their economic status and liquidity (2.7.d).

Cost, Location and Travel: Attending the conference is expensive, which especially impacts students and people with particular jobs (2.2.a), from different parts of the world (2.4.a), and those who are low-income or do not have significant liquid assets (2.7.c). In addition to cost, travel is also made difficult by visa & immigration issues (2.2.d, 2.4.b), which in some cases target specific ethnic groups (2.4.c). Parents, especially those who have to travel long distances, face difficult decisions about attending due to both cost and time (2.6.a). All problems are exacerbated as locations selected for the conference remain low in number.

Transparency, Communication, and Inclusion Activities: The can conference improve it's communication with the community, and the transparency of it's processes. This includes having a formal, transparent structure for how one progresses from author to reviewer to AC to board (to avoid information asymmetry between "in-group" and "out-group"), and having explicit governance documents and elections (2.7.m). Communication can be improved around the Code of Conduct, it's precise meaning, and its enforcement (2.7.l). There was a desire for the organization to work with the media to downplay AI hype (2.7.m). Regarding inclusion efforts, there was a disbelief that the conference would do anything substantial, and a desire to aim for equality of opportunity (2.7.i); to avoid identity politics (2.7.i); to see a public, explicit statement from the conference about inclusion, and to acknowledge past problems (2.7.m); varied opinions about affinity group events and a concern that inclusion efforts are going too far (2.7.j); and to have open discussion and offer training sessions on how attendees can create an inclusive atmosphere (2.7.j).

NIPS 2018 Demographics & Inclusion Survey: Summary of Responses

Hal Daumé III

University of Maryland and Microsoft Research me@hal3.name

Katherine Heller

Duke University and Google Brain kheller@stat.duke.edu

1

Introduction

The authors of this document¹ were appointed as inaugural Diversity & Inclusion co-chairs for NIPS 2018. One of our goals was to understand who makes up the NIPS community, and what issues they face related to inclusion and belonging. We also collected demographic information so that (a) we can understand who is a member of the NIPS community today; (b) we can track how our community changes over time; (c) we can understand problem areas and develop strategies to address challenges. In that spirit, together with the General Chair (Samy Bengio) and Senior Program Chair (Hanna Wallach), we conducted a survey of NIPS participants, related to demographics and inclusion.

The survey focused on the following primary participant dimensions: job sector, age and education (§2.2); gender and sexuality (§2.3); country of residence, language and ethnicity (§2.4); disability (§2.5); parenting and childcare (§2.6). We ended the survey with open-ended questions allowing for general suggestions to improve inclusion beyond, or elaborating on, the factors we asked about(§2.7). In total, at the time when the survey results were analyzed (Oct 10–13, 2018), 2375 people had participated. We used different URLs to count how many survey participants visited from a link provided to authors and reviewers through the conference management toolkit, how many as part of their registration, and how many through social media and web announcements. The vast majority (97.5%) were from the link to authors and reviewers.

All questions in the survey were optional, and in the design, we promised respondents that only aggregate statistics would be released, that only statistics that include at least 25 individuals (to ensure privacy), and that any information from text boxes would be anonymized and aggregated and only reported in ways that protect the identity of the respondents. IP addresses were not tracked or collected. The survey promised that the only people who have access to the raw data were the authors of this document, Samy Bengio, and Hanna Wallach. This document, and its preparation, are in keeping with that promise.

When designing the survey we endeavored to maintain the highest possible level of respect for those who would fill it out, and to write questions in a way that was as inclusive as possible. To this end, we attempted to consult with authoritative sources whenever possible. Nonetheless, we knew we would make mistakes, and all mistakes are our responsibility. We will make corrections in future surveys, and appreciate everyone who pointed these out.

Acknowledgments. Sincere thanks to Samy Bengio and Hanna Wallach, as well as our advisory board members for all their help in creating the survey and communicating its results. William Agnew, Timnit Gebru, Shakir Mohamed, and Alice Oh: Thank you so much for everything you've done to help us out and help make the conference better for everyone.

¹This is *Version 1* of this document (6 Nov 2018). If significant errors are discovered, we will fix them and the document will be updated. You can always find all versions at http://github.com/hal3/nips2018survey/.

2 Detailed Survey Results

For each section in the survey, questions followed the same basic structure. First, we asked about some specific demographic attribute (for instance, gender) in order to collect basic demographic statistics. Next, we wanted to learn about issues around inclusion that participants had faced (if any) as a result of that demographic attribute. The specific wording of this question, which was the same in every case, was: "Have you ever felt like ____ has led to challenges in participating fully in NIPS, or in feeling excluded from the community? If so, please describe how." The phrasing of this question was intentionally somewhat vague: we wanted to make sure (per suggestions on initial drafts of the question) that people would list things that caused them to feel excluded, even if they were able to "get over it" and participate anyway. Nonetheless, the phrasing is perhaps not perfect, as some respondents commented on (2.7.0). Were we to run a similar survey again, we would also want to ask about things that are working rather than just things that do not: this would enable efforts that rally around these successes.

In all the sections below, we report the basic demographic statistics (insofar as we can, based on the privacy threshold described above), the rate of "Yes" responses to the exclusion question, and a summary of *all* of the comments made describing how respondents have felt excluded. These are grouped and generalized when appropriate, even if they also appear elsewhere in the survey. In some cases, the rate of "Yes" makes more sense when conditioned on a previous demographic attribute. For example, the overall percentage of respondents who have felt excluded due to membership in the LGBTQ+ community is more interesting as a conditional probability given membership. In such cases, we also report the conditional probability.

To get a first impression of statistics to come, here are the rates at which participants have felt excluded, conditioned on relevant attributes when appropriate:

- Age: 12% of those born before 1960.
- Education: 15% of those whose highest level of education is a bachelor's degree.
- Gender: 25% of those who report their gender as female/woman/etc.
- LGBTQ+: 13% of LGBTQ+ members.
- Country of residence: 5% overall.
- Native language: 8% of non-native English speakers.
- Ethnicity/race: 9%-17% for various ethnic/racial groups; 10%-20% for individuals who consider themselves to be minorities.
- Disability: 10% of those with at least some disability.
- Parenting: 14% of parents with children they care for.
- Other issues: 8% of participants mentioned some other issue the survey did not already cover.

2.1 Survey Overview

We asked participants when they first attended NIPS; almost all (2368) responded. Around half of respondents have never attended NIPS. Of those who have, 25% first attended in 2015 or more recently, and 40% first attended in 2010 or more recently. We next asked how often participants attend or submit to NIPS; almost all (2356) responded. Just under half of respondents submit or attend every year; 12% never submit or attend. Finally, we asked how people participate (submitting; reviewing; attending; organizing; or other); almost all (2339) responded. The vast majority of respondents submit papers regularly (89%); just under half review regularly, and just under half attend some NIPS-related event regularly.

2.2 Job Sector, Age and Education

In the second section, we asked about job sector, age and education level, and whether these gave rise to any issues of inclusion. Of the 95% who responded to the sector question, about 3/4 of are in academia and about 1/4 are at an industrial research lab (some are in both, as well as other sectors).

We next asked about age (94% response rate) and education level (95% rate). The vast majority (94%) of respondents were born between 1970 and 1999; 81% were born between 1980 and 1999. A significant majority (82%) have obtained or are working toward a Ph.D.

With respect to the inclusion question, of the 2199 who responded (93% rate), 7% felt that their job sector, age, or level of education has led to inclusion/participation challenges. When conditioning this on people

born before 1960, the rate increased to 12%. When conditioning this on people whose highest education is a bachelor's degree, the rate rose significantly to 15%.

Specific observations and experiences related to exclusion in the community were:

- a. Cost: Respondents reported difficulties with high registration costs, and travel which can be expensive. This makes participation difficult for students, or for those whose job does not provide substantial travel support. Respondents also reported lack of funding and support. There was a suggestion to have lower registration rates for those who create content for the conference (authors).
- b. Cliquishness & Elitism: Those who are not from well established groups, labs, sectors, or fields can find themselves excluded, can find networking and finding a mentor difficult, and find it difficult to get papers accepted. This holds both for newcomers to science, as well as those who are already well-established in other fields. In reviewing, respondents reported a bias against work that cites most non-NIPS papers, and a strong bias against non-native English writing even if it is fully comprehensible (see also § 2.4). Respondents reported several issues with transparency at NIPS (see also § 2.7). Respondents reported difficulty as an outsider understanding the inner workings of the NIPS process, like bidding and reviewing. They also reported that despite having had papers and having reviewed, they've never been asked to take on a more significant role, which they believe has to do with social circles. Respondents reported a perception of elitism in general, but specifically around whether someone without a Ph.D. can make valuable contributions or can take a serious leadership/organizational role. There were also reports of elitism around what is considered "real" machine learning research. Respondents reported an elitism around large American research labs. Respondents found talks impenetrable for students outside a specific area. Respondents feel judged by their institution/advisor, not by their contributions.
- c. Parties: Respondents reported that invite-only corporate parties can exclude people whose employer is not a "big name." Moreover, respondents reported that with senior researchers jumping between invite-only club-like parties in the evening, it is difficult for junior researchers to find time to talk to them about research. (More discussion of corporate parties in §2.7.)
- **d. Visas:** Respondents reported difficulty obtaining visas, obtaining visas on time (especially with respect to workshop paper acceptance notifications), and issues specifically related to the U.S. travel ban that make it difficult or impossible to participate or even attend the conference (see also § 2.4).
- e. Topicality: Respondents reported a perceived bias toward "trendy" topics, and away from applied work (in particular in biology, speech/audio, neuroscience, and other closely related fields). Respondents also reported that it's difficult to convince NIPS reviewers of new ideas, especially when one does not come from a big lab. This can be exacerbated by repeated reviewer requests for additional baselines on toy domains. Reviewers are often unqualified and reject papers that are in-scope as out-of-scope. Respondents also reported a bias against "flashy" applications, which may require millions of dollars of compute, even if they are arguably more important, and against topics of import outside of academia/IT-sector-companies.
- f. Additional: Respondents also reported the following perceptions and difficulties: [a] ageism against older researchers; [b] difficulty participating in the conference when one's job does not encourage publications; [c] difficult being taken seriously as a younger researcher and being mistaken for a recruiter, and lack of support for submissions; [d] it is difficult to attend because of timing with teaching; [e] organizers seem not to invite younger, but well-established, researchers as invited speakers; [f] straight men are increasingly excluded from the field (see also § 2.3); [g] a bias against those who work in the government on applied machine learning; [h] significant issues of sexism personally experienced, or second hand hearing about, including by prominent members (see also § 2.3); [i] everything at the conference is driven by men (see also § 2.3); [j] the conference may never have had an Asian GC or PC (see also § 2.4); [k] feeling isolated as one of the few white Europeans at NIPS (see also § 2.4); [l] difficulty participating due to poster overcrowding (see also § 2.5); [m] difficulty attending while having a family (see also § 2.6).

2.3 Gender and Sexuality

We asked for participants to provide their gender as a free-text response; 87% responded. At the risk of over-simplifying the results, 84.8% reported their gender as male/man/etc., 14.9% reported as female/woman/etc., and 0.3% reported a gender that does not fit into one of those categories (details omitted because the raw number is less than 25).

The impact of gender on age among respondents is negligible: female/woman/etc. respondents' distribution over decade-of-birth is nearly identical to the overall distribution. The same is true for education level, yet of the female/woman/etc. respondents, 15% reported that their *job sector or age* led to issues of exclusion, versus only 7% in the whole population (of which they account for only 15%).

With respect to the inclusion question, of the 85% who responded, 4.3% responded "yes." When conditioned on respondents who reported their gender as female/woman/etc., this rate increased to 25%.

Specific observations and experiences related to exclusion in the community were:

- a. Culture of Sexism: Respondents reported experiences of: [a] sexual harassment at sponsored parties; [b] seeing the conference welcome openly sexist people; [c] observing organizers of the conference condone harassment by organizers; [d] "big name" researchers being okay with sexist behavior; [e] regularly hearing sexist comments and jokes (including but not limited to the conference name), and sexually abusive verbal comments; [f] frequent microaggressions related to gender or race; [g] seeing male researchers making no effort to talk to female researchers; [h] self-doubt, wondering if you belong; [i] and hearing comments that there's no sexism in the field.
- b. Respect: Respondents reported experiences of: [a] not being taken seriously due to their gender; [b] unwelcome, persistent advances from men at the conference; [c] others not expressing interest in their work due to their gender; [d] being spoken over or interrupted; [e] condescension from male colleagues; [f] being actively avoided by men; [g] being asked if they, as a woman, were the one who actually performed the research; [h] hostility toward those outside some inner circles; [i] being asked about one's personal life or life experience as a woman in ML rather that research.
- c. Representation: Respondents mentioned the difficulties surrounding: [a] having few visible women (particularly at workshops); [b] being mistaken, as a woman, as a staff member/girlfriend/partner, [c] finding mentors and networking, and a need to initiate all conversations; [d] hearing others say an invited speaker was selected only because of her gender; [e] feeling a need to prove oneself and be a "representative" for all women.
- d. Additional: Respondents also reported: [a] fear of coming out as transgender and not being welcomed; [b] a concern that inclusion efforts end up excluding/marginalizing other groups; [c] not feeling allowed to dress femininely; [d] a need to avoid certain companies' parties because of an anti-woman attitude there; [e] straight males are discriminated against; [f] a desire for balanced gender events (not 10% women; not 90% women); [g] straight/cis/white men not feeling able to participate/contribute to discussions (particularly around fairness); [h] typical white males should belong to a minority group to belong; [i] incredible frustration with the extremely slow speed of NIPS dealing with sexual harassment issues; [j] women are more easily included in social events; [k] difficulty in finding shared accommodation based on gender; [l] not all minorities are being "included"; [m] a concern that the Code of Conduct is unnecessarily harsh/broad, and straight men are in a dangerous situation.

We asked if participants belonged to the LGBTQ+ (lesbian, gay, bisexual, transgender, queer, etc.) community; 88% responded. Around 5% of respondents identify as part of the LGBTQ+ community. There is a small, but significant correlation with age: members of the LGBTQ+ community tend to be younger on average (more often born since 1990). Of those 5% who belong to the LGBTQ+ community, around 13% felt that their identity has led to feelings or experiences of exclusion (however, about 4% of those said in the comment field that they do not feel excluded because they are not out professionally and/or at NIPS). Specific observations and experiences related to exclusion in the community were:

- a. Being Out: Respondents reported that they are not out at NIPS, would not feel comfortable coming out, and do not feel welcomed.
- b. Harassment: Respondents reported harassment from coworkers & visitors from the NIPS community.
- c. Representation: Respondents expressed a desire for more visibly out queer role models at NIPS.
- **d. Additional:** Respondents reported awkwardness with sharing rooms or finding shared rooms. Respondents reported that non-membership in the LGBTQ+ community makes them feel excluded or that they lack special treatment.

2.4 Country of Residence, Language and Ethnicity

We asked participants what their country of residence is; 93% responded, representing 62 total countries.² The most frequent responses are: 42% U.S.A, 9% U.K., 8% China, 6% Canada, 5% Germany, 5% France.

When cross-tabulated with how participants participate (attending versus submitting), we find some differences. Respondents from those top six countries submit at a rate of 94–98% (in addition to Switzerland, Japan and Israel). However, statistics around respondents *attending* the conference is more highly varied by country: from the U.K., 79% attend; from the U.S.A., Canada, France, Germany, Switzerland and Japan, 60–68% attend, while from China, only 20% attend.

Overall, 5% of respondents (83% response rate) reported inclusion challenges. Specific observations and experiences related to exclusion in the community were:

- **a.** Time & Cost: Respondents reported that the cost of participation can be prohibitive, especially when the conference venue does not rotate around the world, and especially for people from LMIC countries or the global south.
- b. Visas & Immigration: Respondents reported as barriers to participation: [a] the time to get a visa; [b] the ability to get a visa; [c] single-entry visas in the U.S.; [d] U.S. travel policies (e.g., the travel ban) and U.S. immigration officials.
- c. Reviewing & Topics: Respondents reported concerns that: [a] reviewing standards are highly biased toward people at U.S. institutions; [b] the conference tends toward topics that are trendy in the U.S.; [c] that there is a reviewing bias against papers with authors from the global south (double-blind reviewing notwithstanding, as respondents reported an impression that high profile labs frequently share submitted papers with each other).
- **d.** Additional: Respondents reported: [a] experiences of antisemitism and racism (see also §2.4); [b] challenges getting invitations to corporate parties for those not from U.S./Canada (see also §2.7).

Our next question asked if the participant considered themselves a native English speaker; the response rate was 84%. A significant majority (70%) of respondents do not consider themselves native English speakers. The rate of native English speaking varies by country; the countries with the highest percentage of native English respondents (excluding cases with < 25 respondents) are: 48% for the U.S.A., 44% for the U.K., and 34% for Canada.

Of the 83% of participants who responded, 5% reported issues with exclusion due to language background; the rate for non-native speakers was 7.5%. Specific observations and experiences related to exclusion in the community were:

- **a. Reviewing:** Respondents reported experiences of: [a] condescending and dismissive reviews regarding English ability; [b] papers being rejected for relatively minor grammar issues; [c] a bias against papers written by authors who are native English—but not American English—speakers.
- b. Participation: Respondents reported experiences of: [a] bias against speakers with "foreign" accents (especially Hispanic or Middle Eastern), or who do not speak completely fluently, which is exacerbated for introverts or those with language impairments; [b] feeling judged on technical competence due to non-fluent English ability; [c] difficulty understanding jokes and metaphors (both in talks and social situations); [d] being intimidated to speak due to language barrier, and people ignoring them or being unwilling to re-explain things; [e] not being invited/allowed to give talks; [f] not being introduced to senior researchers; [g] not feeling comfortable asking questions during Q/A; [h] not being invited to events/parties; [i] fear of revealing identity in reviews or papers due to language skills; [j] difficulty when poster presenters describe their work in a language other than English; [k] observed mockery of presenters' language skills.
- c. Additional: Respondents expressed: [a] concern about misunderstandings related to the Code of Conduct as relate to being a non-native English speaker (in particular, worries about unintentionally offending someone); [b] difficulty understanding talks/posters presented by non-native speakers.

 $^{^2}$ The survey unfortunately included an error, listing Taiwan as "Taiwan, Province of China", when, in fact, Taiwan is not a province of China. We are deeply sorry for this error. We corrected it, but it took us too long to do so. We will be more vigilant about this in the future.

The next question asked about race/ethnicity. In general, many respondents had difficulty with or expressed an objection to, this question, due to it's U.S.-centricity or perceived irrelevance to the scientific community; nevertheless, the response rate was 79%. Of those who responded, roughly 50% identified White/European, 27% as East Asian, 12% as South Asian, 5% as Middle Eastern/North African, 4% as Hispanic, 3% as Latina/Latino, 3% as South-east Asian, 2% as "Other", 1.5% as Black, and counts less than 25 for other categories. These may add to more than 100% because participants can select multiple options.

Around 3% of respondents have faced challenges related to their race/ethnicity. This rate changes significantly when conditioning on particular race/ethnicity groups (please see the Appendix, page 7, for the exact wording of the ethnic/racial categories); in particular, it (significantly) drops to 0.8% for White/European; and it rises to around 17% for Black, 15% for Middle Eastern, and to 8.5% for both Hispanic and Latinx. The categories with the fewest respondents cannot be reported separately (fewer than 25 respondents each), but when merged (Native American, Central Asian, and Pacific Islander), the rate is 17%.

To avoid issues around the U.S.-centricity of these categories, we also asked if participants were minorities where they were raised or whether they currently live. Around 15% of respondents (80% response rate) were considered to be minorities in their country of current affiliation, and about 10% in the country in which they were raised/educated (81% response rate). Around 2% of respondents have faced challenges related to being in a minority group (around 10-20% of those who consider themselves to be minorities). We additionally conditioned on gender being female/woman/etc. to analyze an intersectional impact; in this case, the 2% rate rose to 4.6%. It was impossible to do any conditional analysis on this data due to the low counts overall.

Specific observations and experiences related to exclusion in the community were:

- a. Representation: Respondents reported challenges due to: [a] a significant oversampling of white men at the conference; [b] a lack of Black or Latinx attendees at the conference; [c] a lack of Asian organizers; [d] very little overall ethnic diversity in positions of leadership, panels or talks, particularly when intersecting with language ability; [e] a lack of role models.
- b. Hostility: Respondents reported experiences of: [a] racism against people of Asian decent; [b] antisemitism; [c] hostility toward people from the Middle East; [d] inappropriate or offensive questions or comments around participants' ethnic backgrounds; [e] not being taken seriously or having one's opinions valued; [f] condescension or displayed perception of being non-technical toward people based on their ethnicity, or toward their country of origin; [g] constant questioning by others about the need for diversity efforts; [h] difficulty interacting with people from some countries; [i] prejudgment based on name/surname; [j] backlash related to speaking up about diversity issues.
- c. Visas: Respondents reported significant issues related to obtaining visas, particularly with respect to travel/immigration policies that target people of specific ethnicities (e.g., in the U.S.). Moreover, respondents expressed frustration that NIPS organizers have dismissed concerns about travel/visa difficulties.
- **d. Full Participation:** Respondents reported: [a] difficulty understanding cultural references in talks; [b] difficulty participating in small talk; [c] feeling responsibility to be a trailblazer and be to a "representative" for their race/ethnic group.
- e. Additional: Respondents reported: [a] fear that impromptu country-based social groups formed on Whova divide rather than unite the community; [b] not receiving scholarships due to incorrect racial perceptions; [c] difficulty moving career from Europe to the U.S. [d] concern about misrepresentation in too broad or poorly designed ethnic categories on this survey

2.5 Disability

We next asked questions related to disabilities due to health problems, where participants (rate=80%) were asked whether they had "no difficulty," "some difficulty," "a lot of difficulty," or "cannot do at all" for different activities. Due to relatively low overall counts for the more extreme categories, we are reporting percentages only for those who report "some difficulty" or more. Of all respondents, 12% reported at least some difficulty seeing; 8% at least some difficulty remembering/concentrating; 7% communicating; 4% hearing;

³Respondents pointed out a possible error in the definition of Latina/Latino, and separately a concern about why "Asian" was split into different groups but "European" was not.

⁴We made a mistake in this part of the survey. The color scheme we chose included a substantial amount of gray text on a white background, which was hard to read for some survey participants.

and 1.5% walking/climbing stairs. Overall, 1.4% reported difficulties (roughly 10% of those who reported at least some difficult at one of these activity). Comments related to this question are:

- a. Poster Sessions: Poster sessions led to several challenges: [a] standing for long times at one's own poster or at others' posters can be difficult due to a disability; [b] hearing clearly in large, crowded poster sessions can be difficult; [c] crowded poster sessions can lead to claustrophobia.
- b. Colorblindness: Some papers and talks are not accessible to people who are colorblind.
- **c. Diet:** Difficulty finding food at or near the conference that is low in carbohydrates, that is acceptable for people with diabetes, or that have other dietary needs or preferences (and a suggestion to include references for alternative grocery stores near the venue).
- **d. Additional:** Respondents also reported: [a] difficulties related to writing/typing and/or mental health issues and speech disorders; [b] difficulty in high-altitude areas; [c] difficulty reading the gray on this survey; [d] worry that this survey is not accessible to blind users.

2.6 Parenting and Childcare

The next section focused on parent and childcare. Around 25% of respondents (rate=80%) have children they are responsible for. Of those who have children they are responsible for (response rate of 37%), 14% reported inclusion challenges related to being a parent. Furthermore, 14% of respondents reported that challenges relating to children has prevented them from attending NIPS in the past. We asked for issues related to childcare/parenting, as well as specific suggestions for how the conference could support them. Specific observations and experiences related to exclusion in the community were:

- **a. Cost**: Respondents reported challenges because childcare is expensive, traveling with children is difficult and expensive (especially when the conference is far).
- Logistics: Arranging childcare is time-consuming, finding child-related activities in a foreign country is challenging.
- c. Scheduling: Respondents mentioned issues related to how the conference schedule is set: [a] Having events (poster sessions, parties) that run into the evening make it difficult for parents to participate; [b] there is difficulty getting into rooms for talks after having had to care for a child during a break; [c] lack of places for fathers to care for children (e.g., changing rooms); [d] timing of the conference coincides with many children's activities (school performances, etc.).
- d. Additional: Respondents reported challenges related to: [a] most childcare efforts focus on small children, not teenagers; [b] the compressed reviewing timeline is difficult for parents; [c] growing emphasis on after-hours parties is very difficult for parents; [d] difficulty finding information about NIPS childcare options on the website; [e] attending over the weekend is particularly difficult; [f] childcare providers not speaking the same language as the child; [g] hostility in the community toward parents.

Specific suggestions made are:

- a. Cost Subsidization: Many suggestions around how cost subsidization could help: [a] As much as possible, to subsidize childcare; [b] allow parents to bring one's own care provider; [c] reimburse providers at home; [d] subsidize travel; [e] to provide discount cards for local child-related activities.
- b. Logistical: In general, making things as simple as possible because parents are already overloaded: [a] providing links to resources and local childcare options; [b] providing children's food, diapers and other necessities that are bulky/hard to pack; [c] providing lists of children's activities; [d] providing communication for parents to pool resources (including potential "nanny shares" in a hotel).
- **c. Additional:** [a] allow remote participation or have satellite events; [b] having childcare at a specialized facility (not the conference center, which may be under-resourced).

2.7 Suggestions to Improve Inclusion

The survey acknowledged that it only focused on a subset of possible inclusion issues. We asked respondents if there were other issues that we might want to consider looking into in future surveys (156 responses, 7% rate). We also asked for general suggestions on what NIPS, or NIPS participants, can do to make the con-

ference more inclusive (191 responses, 8% rate). And finally we asked for specific comments or suggestions on the survey itself (122 responses, 5% rate). Because there was substantial overlap in the answers to these three questions, we have merged the answers below.

- a. Newcomers: Respondents discussed issues related to being a relative newcomer at the conference. Respondents reported that this is particularly challenging when one does not come from a well-known university (in the NIPS community) and/or one does not work with a "famous" advisor (in the NIPS community). Respondents reported the conference as highly intimidating to new-comers, especially those from other fields. Specific suggestions included: [a] a matching (or other) system to help with networking; [b] ways to help find mentors and specific mentoring programs for newcomers; [c] student meetup events; [d] speed mentoring tables; [e] a "NIPS First Time Attendee" event (at the beginning of the conference).
- b. Corporatization & Parties: Respondents here and elsewhere mentioned many issues with the corporatization of the conference in general, and the corporate parties in particular. Specific issues raised include: [a] too much corporatization, and frustration with talk sessions or workshops where more than half of the talks are from the same company; [b] lack of industry involvement beyond a few large companies; [c] heavy and expected alcohol consumption at parties (inclusion issues around alcohol also intersect with religion); [d] talks from companies that are essentially highly polished marketing presentations; [e] several incidents of sexual harassment at corporate parties; [f] that cliquishness, U.S.-centricity, etc., lead to highly non-inclusive events, making others into second class citizen.
 - Suggestions included: [g] have NIPS take far more control over the corporate events; [h] start an industry track, [i] ban industry all together from the conference; [j] enforce a no-alcohol rule, or alternatively, avoid open bars; [k] enforce a rule that all corporate/sponsor parties need to be open invitation to any NIPS attendee (perhaps only for events greater than a minimum size); [l] have industry events during the day (e.g., lunch time); [m] hold more official social events to crowd out the corporate ones; [n] diversify sponsorship opportunities to allow smaller sponsors to participate.
- c. Economic, Country & First Gen Status: Respondents raised several challenges: [a] the cost of attendance can be prohibitive for participants in poverty, with low-income, or who do not have liquidity; [b] the bureaucracy and lack of transparency of how the conference is run leads to information asymmetry, and difficulty "breaking in," particularly for participants outside the "inner circle" or first generation students; [c] economic issues can lead to relative lack of computational resources, which reviewers can presuppose when reviewing; [d] illiquidity means home institution needs to process registration, which is unlikely to happen in eleven minutes; [e] level of spending on research infrastructure is a barrier for low-income attendees; [f] participants from rural areas may have different experiences than others; [g] immigration, visa, and refugee status are dimensions for future surveys.
 - Respondents observed that economic status may go a long way to explaining other forms of exclusion. There were several suggestions made: [a] provide travel awards for students from global south or with financial need; [b] do more outreach to countries with less established academic institutions; [c] have proceedings-only papers that do not require attendance; [d] take financial hardship into account for volunteer positions and do not restrict those just to students; [e] avoid hosting the conference in the U.S., or other countries with discriminatory visa/immigration policies.
- **d. Registration:** Respondents reported issues related to registering for the conference this year. Respondents described how the near-immediate selling out disadvantaged people by time zone (and therefore by country), by parts of the world lacking strong internet infrastructure, and by the financial ability to simply purchase a ticket "now" and decide later whether to cancel or not.
 - Specific suggestions were: [a] give our registrations by lottery; [b] reserve registrations by geography, by income status, and by membership in one or more under-represented groups; [c] put an upper limit on the number of accepted registrants from one companies; [d] charge industry participants more; [e] offer free registration to authors; [f] separate out an industry track from a research track.
- e. Reviewing & Topics: Respondents reported concerns related to reviewing in general, and the "trendiness" of topics in particular. Specific issues raised were: [a] reviewing and the conference seems highly biased toward trendy topics (with a particular U.S. bent); [b] reviewing is no longer double blind, because area chairs can see author names, because of arxiv (which leads to well-documented inclusion issues), and because people can recognize their friends' work; [c] breaking into NIPS when coming from a different area is very difficult; [d] reviewers prioritize theory over applied research, even though ML

is highly applied these days; [e] reviews often have negative tone and/or are condescending; [f] reviewers who completely dismiss a paper without investing any effort to understand it; [g] domain experts, who are not deep learning experts, are excluded; [h] COIs are often missed.

Specific suggestions were: [i] broaden what is considered acceptable work; [j] improve the quality and tone of reviews; [k] have an applied track; [l] ban arxiv; [m] provide a proofreading service; [n] have required training for reviewers; [o] make an effort to connect to related fields and encourage work that translates across fields; [p] better monitor the reviewing process; [q] don't accept too many papers; [r] avoid rejecting papers because they don't "look like a NIPS paper"; [s] diversity reviewers to avoid "inbreeding."

- f. Conference Logistics: Respondents raised several issues related to how the conference is organized:
 [a] the timing of the event is difficult for professors who care about teaching, TAs who need to finish the semester, and students still taking classes; [b] not all participants can eat the food that they pay for due to dietary restrictions (e.g., Kosher, Halal, gluten free, vegan, etc.); [c] travel costs are prohibitive when the conference is held frequently in the same location/country; [d] night sessions (and evening parties) are difficult for parents, for introverts, and for people traveling long distances; [e] crowded posters are difficult for participants with hearing loss, and those who get claustrophobic.
 - Specific suggestions were: [a] have inclusive catering, and provide references for nearby establishments; [b] avoid open bar events; [c] schedule the conference one week later; [d] rotate the location around the world; [e] offer telepresence or online opportunities for participation; [f] avoid night sessions and evening parties [g] give more space to posters.
- g. Cliquishness & Elitism: Respondents reported issues with elitism (in particular, elite universities and companies), and cliquishness at the conference, which they report has made it difficult to become part of the community and has led to isolation. Suggestions made include: [a] continue using the Whova app to help attendees find similar people; [b] reword the condescending "I won't review again if this is accepted" description (and related ones) from the paper review form; [c] provide support to help people break in to cliques; [d] avoid over-hyping of the same few "rockstars"; [e] encourage attendees to have lunch with someone they don't know; [f] remove affiliation and country from name badges.
- h. Religion & Observances: Respondents reported experiences of: [a] antisemitism; [b] offensive conversations because others assumed that all participants are non-religious and made ridiculing comments about faith; [c] the conference ignoring or shunning religious groups and observances. Suggestions made were: [a] offer a prayer/meditation room (particularly relevant for those attendees who pray throughout the day); [b] offer inclusive catering.
- i. Politics: Respondents reported issues around the topic of politics, and experiences feeling unwelcome because of a general presumption that all attendees are "left-learning", and that none have a conservative (in the U.S.-sense) political viewpoint. Respondents reported experiences of discrimination due to their right-leaning political views. Additional suggestions were: [a] avoid identity politics; [b] avoid all politics in general; [c] avoid further focus on diversity issues (e.g. through surveys, etc.) because this is not a problem and has never been a problem in science; [d] aim for equality of opportunity not equality of representation at the conference.
- j. Diversity Events: Several respondents addressed the diversity/affinity-group events, or had suggestions for other events. One male respondent had the experience of not being allowed in to the WiML event. Suggestions include: [a] have a diversity day, which includes diversity of technical background, and is open to everyone to discuss issues and research; [b] encourage affinity-group workshops; [c] stop having affinity-group workshops; [d] offer training sessions or general education (for all attendees) on inclusion; [e] avoid any event that is discriminatory (such as affinity-group workshops).
- k. Representation & Respectfulness: Respondents mentioned concerns related to the lack of visible representation of members of under-represented groups (in particular, in authority positions), and experiences of lack of respect toward such participants. Respondents also reported frustrating with the focus of inclusion efforts on differences between people. Suggestions made were: [a] continue and increase diversity of keynote speakers along many axes; [b] include diversity of invited speakers and organizers as an explicit workshop acceptance criteria; [c] promote more queer role models; [d] improve respectfulness of questions, particularly in Q/A sessions in workshops; [e] improve general attitude of organizers and participants at the conference; [f] encourage sponsors to not just have men's size t-shirts; [g] elevate organizers of affinity workshops to conference leadership roles.

- 1. Sexual Harassment, Bullying & Code of Conduct: Respondents expressed past experiences with sexual harassment, and concerns that the code of conduct will not be enforced, and that harassment and bullying will continue. Other respondents expressed concerns about the vagueness of the code of conduct, including how it relates to social media usage. Specific suggestions were: [a] have publicized repercussions for past bad behavior; [b] be strict about harassment and bullying; [c] have immediate and publicized repercussions for public sexist/racist behavior; [d] make the code of conduct more explicit because too much is up to interpretation; [e] actively work to prevent sexual harassment.
- m. Communication & Transparency: Respondents expressed concerns that the running of the conference is highly opaque to non-insiders, and that communication is poor. Specific suggestions were: [a] prominently display a dedication to inclusion on the nips.cc page; [b] actively downplay hype around AI/ML in the media; [c] have a more procedural mechanism for selecting PC members, board members, and other members of the NIPS hierarchy; [d] have a constitution, by-laws, and formal procedures for all major activities related to the conference; [e] improve transparency of structure and governance of the conference to avoid information asymmetry; [f] announce the code of conduct significantly at the conference; [g] explicitly and publicly acknowledge that diversity and harassment problems are not new but have been going on for years.
- n. Additional: Respondents raised several additional concerns that do not directly fit in one of the above categories, and also made additional suggestions. These concerns were: [a] some organization choices make explicit assumptions about participant interest (e.g., choice of music at events); [b] many challenges revolve not around groups per se, but around, for instance, economic collapse or other geopolitical issues; [c] a general skepticism that change will actually happen; [d] roles are given to unqualified people just to satisfy diversity quotas/desires.
 - The specific suggestions were: [e] explicitly solicit the points of view of disadvantaged attendees; [f] provide support of participants who do not feel included but also do not belong to one of the affinity groups; [g] do not shy away from very explicit public statements about the inappropriateness of sexual harassment; [h] force "TITS" to change its name; [i] offer real-time subtitling and translations of talks; [j] do not include percentage of people from different groups in presentations about numbers of attendees/reviewers (it leads to a feeling of being singled out); [k] and encouragement of making active steps; And finally, respondents offered both support of and opposition to the proposal to change the name of the conference.
- o. The Survey Itself: Respondents raised several concerns about the survey itself, as well as suggestions around surveying. Concerns were: [a] the survey will mostly be taken by privileged people; [b] it is unclear how the survey will be used; [c] the survey is too U.S.-centric; [d] "Taiwan" was listed incorrectly (see § 2.4); [e] the definition used for Latinx is strange; [f] the colors on the survey were hard to read; [g] it was strange to split apart Asia but not Europe; [h] the survey was too long.
 - Specific suggestions were: [i] not to do surveys like this one (people are different and we should accept that); [j] to do the survey again after the conference; [k] consider asking about mental health (depression, autism, Asperger's, OCD, social anxiety, etc.); [l] not to offer money for taking the survey (see also: corporatization); [m] make the questions about "challenges in participation" more clear; [n] ask about specific recurring issues; [o] ask for sex in addition to gender; [p] ask about issues that colleagues have faced; [q] to investigate mental health and conditions like autism.

Finally, we gave participants the opportunity to "opt in" and provide their nips.cc account email address to (a) be entered into a chance to win one of ten \$100 Amazon gift card (generously provided by Amazon), and (b) enable auto-population of any future survey. A total of 838 participants (35%) opted in, and on Oct 10, 2018, we used a Python script to randomly select ten winners. These were contacted by email to confirm that they could accept the gift card; they all did, and they have been sent directly from Amazon.

Appendix

In the final three pages of this document, we include the full text of the survey and all answers. This is also available online at https://www.surveymonkey.com/r/HK7F5SM.

clusion and Demographics Survey for NIPS Participants 1. Survey Overview As part of several efforts to improve inclusivity at NIPS, we ask that you fill out this demographics and inclusion survey. This should take about 15-20 minutes of your time. Why? We are very interested in knowing how the conference can improve in ways that make all attendees feel welcome, included, and like they can contribute to scientific progress within our community. We are also collecting demographic information (following NCWIT and CRA-W) so that (a) we can understand where we stand today as a comumunity, (b) we can track how our community changes over time, and (c) we can understand problem areas and develop strategies to address challenges that exist. Privacy: All questions are optional. By default, this survey is anonymous. We are not collecting IP addresses. However, because one of our goals is to track changes over time, we will repeat (variants of) this survey in the future. At the end of the survey you will be able to opt-in to linking your responses to your nips.cc account. If you opt-in, this will save you from having to fill out this survey in future years; instead, you can simply authorize copying the data from one year to the next. If you elect to de-anonymize your answers, you will be eligible to win one of ten \$100 Amazon gift cards (generously donated by Amazon). [NOTE: The raffle ended Oct 10, 2018; you're still welcome to leave your email address but unfortunately we can no longer offer gift cards!] The only people who will have access to the raw data from the survey are the 2018 Diversity and Inclusion co-chairs (Katherine Heller and Hal Daumé III) and the 2018 General and Program Chairs (Samy Bengio and Hanna Wallach). Any future transfer of data to future chairs will be entirely on an Publicizing results: Only aggregate statistics will be made public, and only statistics about groups that include at least 25 individuals (to ensure privacy). Any information from text boxes will be anonymized and aggregated and only reported in ways that protect your identities. Please contact $% \left(1\right) =\left(1\right) \left(1\right$ Katherine or Hal with any concerns or questions. Organization of Survey: This survey consists of six main sections: (1) Job Sector, Age and Education; (2) Gender and Sexuality; (3) Country of Residence, Language and Ethnicity; (4) Disability; (5) Parenting and Childcare; and (6) Other issues of inclusion. We value your time and your candor in responding to this survey. Thank you very much.

The first set of questions here deals with the ways—and length of time—in which you are (and have been) involved in NIPS. We are not using this to, for instance, "downweight" the results of people

who have recently joined the community, but only to aid our understanding.

nmunity members. Remember: all questions	stand the career and education background of our are optional. We are interested in knowing what conference, or feeling welcome at the conference, or improving it.
4. In what sector are you currently employed?	
Academia	Industry - Other
Government	Non-profit or philanthropic institution
Industry - Research Lab	
Other (please specify)	
5. In what decade were you born?	
5. In what decade were you born?	
\$]	ve completed, or are in the process of completing?
\$]	we completed, or are in the process of completing? Associate's degree or equivalent
6. What is the highest level of education you have	
6. What is the highest level of education you have Primary education (- 7-8 years of schooling)	Associate's degree or equivalent
6. What is the highest level of education you have Primary education (- 7-8 years of schooling) Secondary education (- 12 years of schooling)	Associate's degree or equivalent Bachelor's degree or equivalent
6. What is the highest level of education you have primary education (- 7-8 years of schooling) Secondary education (- 12 years of schooling) Master's degree or equivalent	Associate's degree or equivalent Bachelor's degree or equivalent Medical Doctorate (M.D., D.D.S., Pharm.D.) or equivalent
6. What is the highest level of education you have primary education (~ 7-8 years of schooling) Secondary education (~ 12 years of schooling) Master's degree or equivalent Juris Doctorate (J.D.) or equivalent	Associate's degree or equivalent Bachelor's degree or equivalent Medical Doctorate (M.D., D.D.S., Pharm.D.) or equivalent
6. What is the highest level of education you have primary education (~ 7-8 years of schooling) Secondary education (~ 12 years of schooling) Master's degree or equivalent Juris Doctorate (J.D.) or equivalent	Associate's degree or equivalent Bachelor's degree or equivalent Medical Doctorate (M.D., D.D.S., Pharm.D.) or equivalent
6. What is the highest level of education you have Primary education (~ 7-8 years of schooling) Secondary education (~ 12 years of schooling) Master's degree or equivalent Juris Doctorate (J.D.) or equivalent Other (please specify)	Associate's degree or equivalent Bachelor's degree or equivalent Medical Doctorate (M.D., D.D.S., Pharm.D.) or equivalent Doctor of Philosophy (Ph.D.) or equivalent
6. What is the highest level of education you have Primary education (~ 7-8 years of schooling) Secondary education (~ 12 years of schooling) Master's degree or equivalent Juris Doctorate (J.D.) or equivalent Other (please specify)	Associate's degree or equivalent Bachelor's degree or equivalent Medical Doctorate (M.D., D.D.S., Pharm.D.) or equivalent Doctor of Philosophy (Ph.D.) or equivalent
6. What is the highest level of education you have primary education (~ 7-8 years of schooling) Secondary education (~ 12 years of schooling) Master's degree or equivalent Juris Doctorate (J.D.) or equivalent Other (please specify)	Associate's degree or equivalent Bachelor's degree or equivalent Medical Doctorate (M.D., D.D.S., Pharm.D.) or equivalent Doctor of Philosophy (Ph.D.) or equivalent

Never	
1980s	2000s
0	-
2010-2014	2016
2015	2017
2. How often do you attend or sub	unit to to NIPS?
(either in the recent past or your e	
Almost every year	
Once every two or three years	
More rarely	
Never	
3. In what manners do you genera	ally participate in NIPS?
I submit papers	
I participate in the review process (a	s a reviewer, area chair, etc.)
I attend the conference and/or associ	ciated workshops
I help organize aspects of the confer	rence or workshops
Other (please specify)	

Inclusion and Demographics Survey for NIPS Participants
3. Gender and Sexuality
These questions are aimed at helping us understand how our community breaks down along lines of gender and sexuality. Remember: all questions are optional. We are interested in knowing what challenges you have faced participating in the conference, or feeling welcome at the conference, particularly so that we can work on strategies for improving it.
In addition to understanding this demographic breakdown so that the NIPS conference can work on addressing any issues that exist, these are also questions that the Women in Machine Learning (WiML) and Queer in Al (QinAl) workshops have asked us to collect answers to.
Queer in Al has told us: It is important to the goals of Queer in Al to understand how participation, broken down by sexual orientation and gender identity, in the conference, changes over time. It is also important for us to understand the challenges faced by members of the conference community, specifically for developing and targeting new programs. Finally, funders of the workshop, highly value such statistics in our reporting.
8. What is your gender?
Please consider filling out the separate Women in Machine Learning survey (regardless of whether or not you identify as a woman).
Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community due to your gender identity or gender expression?
○ No
Yes (please describe)
10. Do you identify as a member of the LGBTQ+ (lesbian, gay, bisexual, transgender, queer, etc.) community?
○ No
Yes
If so, the organizers of the Queer in Al workshop request that you please fill out the more detailed <u>Queer in Al survey</u> .

12

) No	ership in the LGBT			
Yes (please	describe)			
	<u> </u>			

	. Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community duyour language background?
	No
0	Yes (please describe)
16	. How do you identify along ethnicity/ancestry/race lines? (The provided answer selections are US-
	sed, due to reporting requirements for US funding, and may not apply well outside the US; source.)
Ple	ease select any and all that apply.
	American Indian, Native American or Alaskan Native AsianSouth Asian (including India, Pakistan, etc.)
	(including North, Central and South America) AsianSouth-east Asian (including Thailand, Vietnam,
	AsianCentral Asian (including Kazakhstan, Afghanistan, etc.) Singapore, Indonesia, etc.)
	Asian-East Asian (including China, Japan, Korea, etc.) Black, African-American or African Descent (having origin: Sub-Saharan Africa)
	Hispanic (having ethnic origins in Latin America, Spain or Paclific Islander, Native Hawaiian (including Polynesia, Portugal) Paclific Islander, Native Hawaiian (including Polynesia, Micronesia, etc.)
	Latino/Latina (having ethnic origins in Mexico, Puerto Rico, White, or European descent Cuba, Central and South America, etc.)
	Middle Eastern & North African (including the Middle East, North Africa and the Arab World)
	Other (please specify)
17.	. Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community d
to y	your actual or perceived ethnicity/ancestry/race?
	No
	Yes (please describe)

mciusi	on and Demographics Survey for NIPS Participants
4. Cou	ntry of Residence, Language and Ethnicity
of resid	questions are aimed at helping us understand how our community breaks down along lines lence, language and ethnicity. Remember: all questions are optional. We are interested in g what challenges you have faced participating in the conference, or feeling welcome at the ence, particularly so that we can work on strategies for improving it.
addres	tion to understanding this demographic breakdown so that the NIPS conference can work on sing any issues that exist, these are also questions that both the Black in Al and Latinx in Al lops have asked us to collect.
broken also im commu	n AI has told us: It is important to the goals of Black in AI to understand how participation, down by Gender/Sexual Orientation/Ethnicity, in the conference, changes over time. It is portant for us to understand the challenges faced by members of the conference inity, specifically for those who identify as Black/of African descent. Finally, potential funders k in AI such as the National Science Foundation, require us to provide such statistics in our ng.
12.1	What is your current country of residence (where you live most of the time)?
	\$
	•
to yo	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of our country of residence?
to yo	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of residence?
to yo	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community our country of residence?
to yo	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of residence?
to yo	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of the country of residence?
to yo	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of residence?
to yo	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of residence?
14. [Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of pur country of residence? No Yes (please describe)
14. E	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of pur country of residence? No Yes (please describe) Do you consider yourself a native English speaker?

арр	As an international conference, it is unclear what categories pertaining to ethnicity or ancestry are opriate to consider, beyond reporting requirements to US agencies. In the context of your country of
curr	ent affiliation, are you considered a minority? If so, please provide any relevant details.
	No
\bigcirc	Yes (please describe)
	n the context of the country/countries in which you were raised or educated, were you considered a prity?
\bigcirc	No
$\tilde{\bigcirc}$	Yes (please describe)
	,
	Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community
to y	our membership in a minority group (e.g., ethnicity, ancestry, race, etc.)?
\circ	No
\sim	
	Yes (please describe)

Inclusion and Demograp	hics Survey for N	IIPS Participants						
5. Disability								
Part of being an inclusive We are interested to know feeling welcome at the co	v what challenges nference, particul	you have faced parti arly so that we can w	cipating in the confe ork on strategies fo	erence, or				
Do you have any difficulty doing certain activities due to a health problem <u>Source</u>)? No difficulty								
Do you have difficulty seeing, even if wearing glasses (if applicable)?	O		O					
Do you have difficulty hearing, even if using a hearing aid (if applicable)?		0	0					
Do you have difficulty walking or climbing stairs?		0						
Do you have difficulty remembering or concentrating?		0	0					
Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?								
22. Have you faced any to any of these difficultie No Yes (please describe)	challenges particip	ating in, or feeling wel		NIPS community due				
Inclusion and Demograp	hics Survey for N	IIPS Participants						
7. Other issues of inclusion	ion							

Inclusion and Demographics Survey for NIPS Participants
7. Other issues of inclusion
These questions are aimed at helping us understand the NIPS community along different demographic lines. All questions are optional. We are interested to know what challenges you have faced participating in the conference, or feeling welcome at the conference, along various demographic lines.
27. The preceding questions focused on specific groups within in the NIPS community. Naturally, these do not cover all ways in which you may have felt challenges fully participating in NIPS.
Are there other groups with which you identify that you believe are relevant to our goal of inclusivity? If your identity in these groups led to challenges in participating fully in NIPS, please describe how.
28. If you have any additional feedback about how NIPS could be a more inclusive community, please let us know!
29. If you have any feedback on this survey in particular, please let us know!

clusion and Demographics Survey for NIPS Participants	
Parenting and Childcare	
hese questions are aimed at helping us understand what issues parents have faced in articipating in NIPS. Remember: all questions are optional. We are interested in knowing what hallenges you have faced participating in the conference, or feeling welcome at the conference, articularly so that we can work on strategies for improving it.	
23. Do you have children/are you a parent?	
No (skip the rest of this page)	
Yes, but none of them live with me/l am not responsible for their care	
Yes, and one/some live with me/l am responsible for their care	
24. Have you faced any challenges participating in, or feeling welcome/included in, the NIPS community of to your being a parent/the caregiver of children? No	lue
Yes (please describe)	
25. Has lack of childcare, insufficient childcare, or general problems with childcare, prevented you from attending NIPS? No	
Yes	
26. We are planning to have a childcare option at NIPS 2018. What sort of childcare arrangements would take to enable you to attend and participate in NIPS? For instance, this might include child-care at the conference (on-site or at your hotel/accommodations), subsidies/funding for child-care, subsidized childcare at home, subsidization for airfare/food, etc. The more specific you can be, the more helpful.	it

30. Now that you have filled out the entire survey, please decide if you would like toopt-in to linking it to your nips.cc account.

If you choose to opt-in, this will help us track demographic statistics across years, and you will not have to answer duplicated questions in the future. If you do not choose to opt-in, then when we survey participants in future years, you will need to fill out information from scratch.

Remember: regardless of what you choose here, your data will only be visible by the General and Program Chairs for NIPS 2018 (Samy Bengio and Hanna Wallach) and the Diversity & Inclusion Chairs for NIPS 2018 (Katherine Heller and Hal Daumé III). Even if you opt-in now, your data will not be released to anyone else without your express permission. Next time a similar survey is run, you will be asked to explicitly approve the transfer of your information to whomever is running the survey then.

If you would like to opt-in, please go to your<u>nips.cc.profile</u> (you may need to log in). There, you should have an **email address** associated with your account. Please enter that email address here. You will later receive a confirmation email that you will have to acknowledge in order to verify your account information. Once confirmed, your email address will be removed from the raw data and replaced with a unique id; the mapping from unique ids to email addresses will be stored separately and only accessible to the 2018 D&I chairs.

If you opt-in, you will be eligible to win one of ten \$100 Amazon gift cards (generously donated by Amazon). [NOTE: The raffle ended Oct 10, 2018; you're still welcome to leave your email address but unfortunately we can no longer offer gift cards!]

Thank you so much for taking the time to participate in this survey. We take your concerns very seriously and will do our best this year and in the future to continue to improve NIPS.

Please contact Katherine Heller or Hal Daumé III with any concerns or questions. And again, thank you so much for participating.