What's in a name? The need to nip NIPS

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Abstract

There has been substantial recent controversy surrounding the use of the acronym "NIPS" for the Neural Information Processing Systems conference, stemming from the fact that the word "nips" is common slang for nipples, and has historically been used as a racial slur targeting people of Japanese origin. Here, we outline the ways in which this acronym has contributed to a hostile environment towards women in machine learning. We argue that an October 2018 decision by the Neural Information Processing Systems board not to change the name of the conference was based on a misunderstanding of the issues that women face in STEM fields, a poorly-designed survey, and a faulty statistical analysis. We applaud the board for a more recent announcement of the new abbreviation "NeurIPS", and emphasize that this name change is an important first step towards the creation of a more inclusive environment in machine learning.

1   Authors' note

We wrote this article in November 2018, shortly before the Neural Information Processing Systems board announced the adoption of a new abbreviation, NeurIPS. This version of the article has been edited in light of this new abbreviation.

2   What's all the fuss about?

Machine learning, like the rest of STEM, suffers from severe gender imbalance and low retention rates for women, as detailed in a recent report by the National Academies of Sciences, Engineering, and Medicine (1). Recently, the #MeToo movement has led to increased awareness of the overt sexual harassment faced by many female researchers. Notably, the pervasiveness of sexual harassment at computational conferences has drawn international attention (2).

However, more subtle acts of *gender harassment* — defined in (1) as sexist hostility and crude behavior — have gotten less public attention. Nonetheless, gender harassment is extremely pervasive, and is a direct contributor to the challenges faced by women in STEM fields (1). In this article, we argue that "NIPS", the former acronym for the Neural Information Processing Systems conference, constituted gender harassment towards women.

In popular slang, the word "nips" is an abbreviation for nipples. (Furthermore, though not the focus of this article, it has historically been used as a racial slur targeting people of Japanese origin.) At first glance, the fact that a major machine learning conference shared its name with this slang is an unfortunate but unimportant coincidence. In fact, one might hope that members of the machine learning community are sufficiently mature that the conference's name is unimportant: we (the authors) have been told that few, if any, members of the community make the connection between the former acronym and nipples. Unfortunately, this appears not to be the case. At the 2017 conference, Elon Musk made inappropriate jokes about the acronym on stage, participants wore lewd t-shirts involving the acronym, and there was even a pre-conference event named TITS. Furthermore, reminders of the unfortunate acronym are everywhere: online searches for the acronym lead to not-safe-for-work content, the Twitter hashtag #nips is devoted to pornography, and a simple replacement of the `nips.cc` conference website with `nips.com` sends viewers to a pornography website. Vulnerable students have reported being sent links to `nips.com` by their faculty advisors.

In recent months, a number of women (including some of the authors of this article) who publicly expressed support for a change to the conference name have been relentlessly trolled, harassed, verbally abused, and even physically threatened on Twitter, Reddit, and other online forums, as well as via personal e-mail. Much of this harassment has been anonymous, and typically has had an extremely gendered (anti-women) tone. Furthermore, some students have reached out to us (the authors) lamenting the fact that they felt unable to openly express their support for re-naming the conference, due to fear of bullying or retaliation by faculty advisors or others in positions of power. It is clear that certain members of the machine learning community are deeply invested in maintaining the *status quo*, without regards to the societal cost of the conference name.

3 The October 2018 decision not to change the conference name

In April 2018, the Neural Information Processing Systems board announced plans to consider a change to the name of the conference (3). However, in October 2018, they announced their decision not to change the name (4). This decision was based on the results of a survey, as well as the board's preference to pursue other "concrete steps to improve the inclusiveness of the conference".

3.1 A flawed survey and a poor statistical analysis

In order to collect data about the machine learning community's feelings about the conference name, the conference board sent out a survey to people who have attended the conference during the past five years (4). However, surveying only conference attendees results in a very biased sample of a much larger community of potential machine learning researchers. Bias arises due to the fact that some people who are made uncomfortable by the name or by other aspects of the machine learning culture may have decided not to enter or not to remain in the field, or may have chosen not to attend the conference.

(In fact, only 13% of those who completed the survey self-reported as female. This highlights the severe underrepresentation of women in machine learning, although it does not necessarily compromise the survey itself, as analyses can be stratified by gender.)

To analyze the survey results, the conference board simply noted that of the 294 women surveyed, the number who strongly support or support a name change (74 and 56, respectively) is comparable to the number of women who are strongly opposed or opposed to a name change (76 and 41, respectively). However, this analysis implicitly assumes that one person's feeling of discomfort or marginalization as a result of the name should be given the same weight as another person's preference for the *status quo*. This amounts to giving the same weight to false positives and false negatives. Of course, we learn in an introductory statistics course that false positives and false negatives should be assigned weights dependent on context. In this context, we feel that a much greater weight should be given to the views of a person who feels marginalized as a result of the name.

To state this last point more explicitly, *an issue adversely affecting the minority of participants should not be decided by a majority vote.*

3.2   A false choice, and minimization of a real issue

In announcing their decision not to change the conference name, the conference board expressed a commitment to "implement . . . concrete steps to improve the inclusiveness of the conference" (4). These steps include a strengthened Code of Conduct, the appointment of two Diversity and Inclusion chairs, childcare support, and mentoring breakfasts for women. These are all wonderful and much-needed steps in the direction of improving the environment for women and members of other underrepresented groups in machine learning, and we sincerely applaud the conference board for these efforts.

However, the wording of the decision (4) implied the need to choose between changing the name of the conference and taking "concrete steps to improve [its] inclusiveness." This was a false choice: there is no reason that the board could not do both.

The board also suggested that a name change would only be symbolic, and would have no real consequences for improving the environment for women in machine learning. We respectfully disagree: gender harassment *is* one of the major issues faced by women in machine learning, as outlined in Section 2 and as detailed in (1).

3.3   Another argument against a name change

Though not explicitly mentioned in the decision by the conference board, a number of machine learning researchers told us (the authors) that changing the name of the conference would lead to too much confusion in the machine learning community. (If the name changes, then how will people know whether or not it is a top conference?) While we understand this concern, we respectfully do not share it: we believe that the machine learning community is quite a bit smarter than this argument suggests, and would quickly be able to adapt to a change in the conference name.

4   A happy ending, and our recommendations for the future

In November 2018, in response to extensive public backlash to (4), the conference board announced a change in the official conference acronym, to "NeurIPS" (5). We are pleased with this decision, and believe that this provides a reasonable compromise between those who wish to see a reduction in gender harassment in machine learning and those who have concerns about the implications of a name change on the conference's stature (Section 3.3). Furthermore, it serves as a powerful message to women in the field (and, in fact, to non-women too!) that the machine learning community is seriously committed to creating a more inclusive environment.

However, the work for the conference board is far from done. We encourage the board to continue its efforts to create an inclusive environment in machine learning by investing in the other initiatives proposed in (4). These include, among others, providing childcare support for parents, and funding satellite meetings such as Women in ML and Black in AI.

Together, these steps will help ensure that the NeurIPS conference retains its place in the forefront of machine learning research, while also creating a welcoming environment for women and members of other underrepresented groups.

References

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