

Short Essay on Retaining and Increasing Gender Diversity, with Focus on the Role that Men May Play

Goal: 49% M / 49% F / 2% other¹



Marie Curie was the first woman to win the Nobel Prize. This didn't happen because she herself fought for it -- although she did fight hard the whole way to even get to that point.

What happened is that the award was offered to her husband, Pierre.

Pierre refused to accept unless it were also extended to Marie.

And so Marie Curie became the first female to break this barrier....sharing the award in quarters with her husband. (The other half of the award went to

Antoine Henri Becquerel).

It seems that women alone can only do so much. Especially if they're the 7%. Things will really start to change when men are actively looking out for women, fighting hard for gender equality even more so than their female peers.

Some concrete suggestions:

- If you're asked to be on a panel, consider suggesting a qualified female in your stead (especially if you can't make it).

Give the name and explain why she would be perfect in this role.

- If you're asked for an interview, ditto.

- If you're asked for a talk, ditto.

Women may mostly resist this -- talking to a crowd of 93% men sucks, and most of us don't have the guts to stand up in a CS culture where we know we'll face hostility. Encourage one another.

- If you notice a man being an ass to a woman, speak up.

It can't always be on her....For many, that can be too wearing/crushing.

- If you notice a man making eye contact with you in response to something a female has said, even if he is making eye contact *and* speaking towards you, drop that eye contact.

Make eye contact with her instead, and nod etc. Encourage her to say more stuff.

- If a woman speaks up about something related to gender, don't immediately argue back.

¹ I refer to female women in this document, but these terms may additionally include all underrepresented genders. I am speaking from my experience as a woman: I imagine that other underrepresented genders might have similar or related experiences, but I'm not prepared to speak for them until I learn more.

Take a few moments to let the amygdala reaction subside, and then when you're ready, speak to her constructively. How long has this been going on? How does this affect how welcome you feel in this environment? Even if you disagree....you can make that point later. There are 2 sides to every story, so give her the benefit of the doubt that, at least on some level, she knows what she's talking about, and chances are never gets to speak to her side without facing an immediate argument or attack.

- Don't say "that's not because of her/your gender", even if you mean well. Most of us have a strong training in statistics, we should know better than saying something like this. We all work hard on building models with millions of parameters, or hundreds of variables. We all know that each output is not the effect of a single variable (or parameter, or layer) firing. Gender is always one of the variables. So is height. So is voice. So is name. Etc etc etc. We're not working with simple graphical models with one clear "explaining away" variable. We're working in the real world, in a high dimensional space, where we wish we could be so lucky as to know the details of the latent representations. Saying something like this functions to discredit her ability to critically analyze the world around her based on her past experience.

- Do not disagree with her viewpoint about gender difficulties to try and reassure her. That is discounting her opinion and valid life experiences, and doesn't actually help (but makes things worse).

- Tasking women with crowdsourcing/design/data annotation tasks more than men is off the table. Even if they volunteer -- unless their passion is crowdsourcing, etc., encourage women to do something that is explicitly mathematical, or writing/running code that directly implements models. Or as a backoff, evaluating models. There is *definitely* great work to be done in these areas. But let's not make this a woman's job. Men and women should be equally encouraged, both, to do these tasks as well as mathematical tasks.

- All-male meetings are off the table. If there is a meeting with 0% women, there is a problem. This goes double if a woman is actually supposed to be in the meeting. That's unacceptable, they do notice, and that's a classic/common case of "overlooking" (http://m-mitchell.com/why_am_i_here.html), which I understand to be one of the most rampant manifestations of unconscious bias.

- Presentations, opinions, and ideas from women are as important as those from men. If 1 woman makes up 50% of the gender distribution on a team, and our goal is to eventually get to a 50%/50% split, then (arguably) her opinions and thoughts should be actually somewhat upweighted. But if not, then minimally her opinions/presentations are just as important.

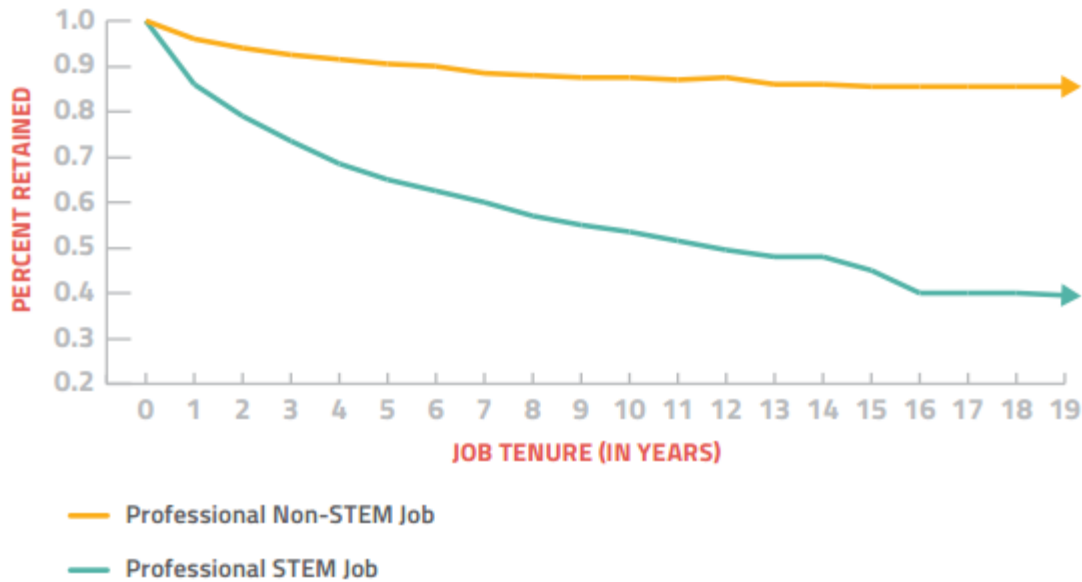
I guess it helps to add: physical contact is out of bounds. As you pass her a cup, don't stroke her fingers with your fingers as the hands get close. Don't try and get a little cuddle in, even if the 2 of you are alone.

To affect positive change **now**, we need to be vigilant and proactive about this. Not just

occasional good gender things (which do help!!), because, as we can see (below), that's not making enough impact in the long-term.

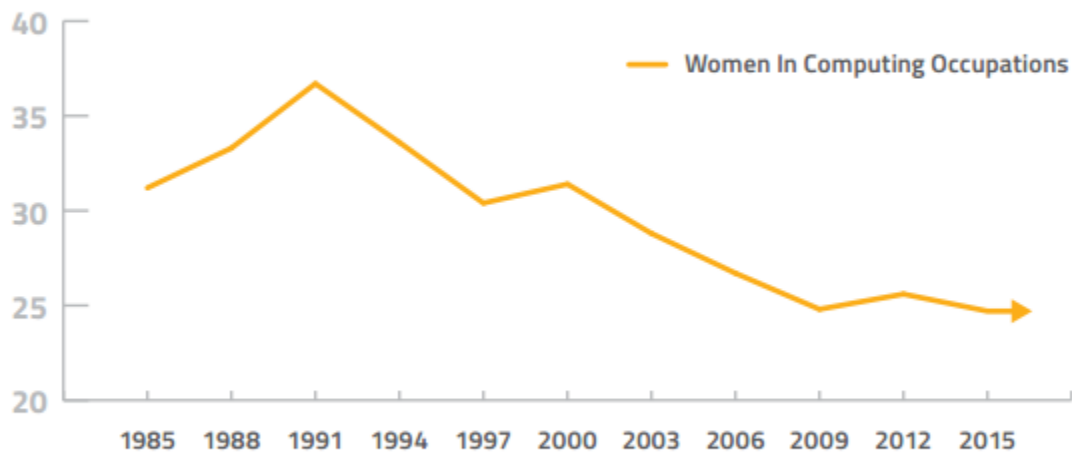
Source for graphs below: 2016 Update, WOMEN IN TECH: THE FACTS. [The National Center for Women and Information Technology, 2016](https://www.ncwit.org/sites/default/files/resources/womenintech_facts_fullreport_05132016.pdf). Pages 7 & 10
https://www.ncwit.org/sites/default/files/resources/womenintech_facts_fullreport_05132016.pdf

FIG. 1.6 // Percentage of Women Retained in Career Field Over Time



Rerendered from Glass et al., 2013

FIG. 1.2 // Percentage of Computing Occupations Held By Women Has Been Declining Since 1991



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