

Race, Gender, and Technology Preparation

Nathan Hutton

1. Were you surprised by anything you learned in any of these? Explain.

The only thing that really surprised me was that more than one in four of the programmers in the 1960s were women, and that earlier than that programming was mostly done by women, and that most of the programmers at M.I.T. were women. I first started the article thinking that it wouldn't really surprise me since Westminster makes it pretty clear that there are a lot of famous female programmers but I didn't know that it was this common back then for programmers to be women. I think this is more significant as well than there just being a lot of famous female programmers since when you hear about an extremely famous programmer (men or women) I usually tend to think that they might have had some kind of mental quirk that makes them extremely good at it, so I kind of just write it off as not relatable. I think it's actually not even good to compare yourself to these super well known programmers since it's actually kind of demoralizing and I think that while it's well intentioned to talk about famous female programmers to encourage female students to consider computer science, I think that using statistics like the one about one in four programmers in the 60s being women is probably a better idea because it's not as overwhelming. It's like how if I want to encourage someone who doesn't workout to start exercising, I wouldn't want them to immediately start comparing themselves to Arnold Schwarzenegger because then they'd just feel weak regardless of how strong they became. I think it's a better idea to talk about how in the early days, programming was considered a woman's job since they were so good at it.

I'm also surprised that there seems to be less women in math and computer studies than there were in the 1960s. I also didn't know that programming was almost specifically targeted at women when the job market for it started to become larger, and that it was pretty much considered a job for women. It also blows me away that 40% of people in CS in India are women despite India being an extraordinarily sexist place overall, which is really significant since India also has such a huge population and is known to have a lot of people aspiring to work in tech.

2. *The Secret History of Women in Coding* discusses some of the historical and social factors that have led to the current paucity of women in technology fields in the USA. Comment a little on your own journey into computing and how it compares to the factors named in the article; is your presence in the computing field partially **due to** these factors or **despite** them, or is it a mix?

When I read that the reason that women became less involved in computing due to the fact that men had more exposure to computers in their childhood starting in the 80s, making them more comfortable with computers and more likely to pursue a career in it, I think that resonated a lot. For me, I really wanted to be a game developer for a long time since I'd played a lot of games growing up (mostly on computers, not consoles) but decided not to since that industry sucks. I

resorted to computer science since I still had a ton of time spent on computers due to gaming, which is something that I don't see women doing nearly as much. For reference, I probably had more female friends growing up than male friends but I would play video games with my male friends whereas none of my female friends ever really played anything outside of the Nintendo Wii. My male friends and I have always liked messing around on our computers and even later on building computers together, so I kind of imagined that a career in computer science would be like that and I felt that at the very least I would know how to do things as advanced as modding games, which felt like it gave me at least some good fundamental knowledge in how to use computers. Also, because it was so easy for me and my male friends to relate to each other with computing, it made the idea of going in CS way more appealing. I thought that at the very least, some of my male friends would go into CS and I would also make new friends in CS easily. So, I can definitely say that my presence in CS is partially due to these factors.

Sometimes my girlfriend and our mutual female friends don't know what they want to do for a career or what they want to study, and I usually encourage them to take a CS course since I enjoy it a lot and had no coding experience prior to Westminster, but they hate the idea because they feel like everyone there will know more than them since they probably grew up using computers (mostly for gaming) more than them. This is true even if they own a laptop that they use consistently for school. My girlfriend is a philosophy major and has even done truth tables in some of her classes but still denies that she'd be good at CS. This is despite the fact that many of the skills I did learn being around computers a lot didn't even really apply at all to what we do in CS and what I did know about them could probably be learned in a week if you were specifically trying to learn these skills (as opposed to just accidentally learning them after incorrectly installing mods for the millionth time). I also don't think that they realize that there are plenty of men who go into CS without this knowledge as well (I have seen it while TAing).

I actually think that coming in with too much computer experience can be a detriment to learning CS because you may be too cocky and think you know too much then go into some of the intro classes and miss some very important details that wouldn't have been missed if you showed up to the class thinking you were bad at using computers. You may be more open to learning if you show up without much experience.

Lastly, I actually think that Westminster has a better ratio of men to women than most universities, and it even has a good variety of personality types which I think is good since it's more encouraging for students wanting to go into CS and will also make for a better workplace. In the article, it talks about how a lot of the early CS people were very antisocial and sort of neurotic, and I'm glad that that's not as present at Westminster because it's certainly much easier to want to work with and collaborate with people who are a little more social and I think that Westminster has a good mix of both (maybe not Compilers though haha). I also don't even know why companies had personality tests that wanted these annoying ass coworkers in the first place, I would think that this would just decrease collaboration and make everyone hate one another, so hopefully this isn't really happening anymore, or is at least going away, which I think it is. I also think that the idea of programming requiring staying at the office for late nights is just counterproductive in general since everyone will just hate their job.

3. Give examples that you have observed, either in your own life or in politics or media, of the model minority myth at work. (This will be harder for some students than for others!) Please try to think of at least three examples you have seen and explain why they either fit into the narrative of, or are propagated by, the myth. (If you are not white, then you are not required to answer this question.)

Going into STEM I always heard (and honestly kind of believed) that there would just be a ton of Asians. While it is true that I've seen more Asians in CS than anywhere else in my life (including in a workplace), I can imagine that it would kind of suck if you're Asian and everyone just expects you to be this genius otherwise they think you somehow failed in a way that people of another race wouldn't have failed. I think Harvard entry tests are a really obvious example of how this affects Asians in a malicious way. Because Harvard believes that so many Asians are going to do well on the test, you have to get extremely high test scores to get in if you're Asian relative to any other race. My understanding is that this is actually because Harvard wants to increase diversity (for instance, you don't have to get a very good score if you're black for opposite reason) but obviously they're doing it in the worst possible way (and this is also probably really insulting to black people). I have a very smart American Asian friend who wouldn't even really consider apply to Harvard for this exact reason.