

Tech's Damaging Myth of the Loner Genius Nerd

Claire Cain Miller

The Google engineer who was fired last week over his memo wrote that most women were biologically unsuited to working in tech because they were more focused on "feelings and aesthetics than ideas" and had "a stronger interest in people rather than things."

Many scientists have said he got the biology wrong. But the job requirements of today's programmers show he was also wrong about working in tech.

In fact, interpersonal skills like collaboration, communication, empathy and emotional intelligence are essential to the job. The myth that programming is done by loner men who think only rationally and communicate only with their computers harms the tech industry in ways that cut straight to the bottom line.

The loner stereotype can deter talented people from the industry — not just women, but anyone who thinks that sounds like an unattractive job description. It can also result in dysfunctional teams and poorly performing products. Empathy, after all, is crucial to understanding consumers' desires, and its absence leads to product mistakes.

Take digital assistants, like Google Home or Amazon Echo. Their programmers need to be able to imagine a huge variety of home situations, whether households with roommates or abusive spouses or children — as made clear when a child ordered a \$160 dollhouse and 4 pounds of sugar cookies on the Echo. "Basically every step is very collaborative," said Tracy Chou, who was an engineer at Pinterest and Quora and is now working on startups. "Building a big software system, you could have dozens or hundreds or thousands of engineers work-

ing on the same code base, and everything still has to work together." She added, "But not everyone is the same, and that's where empathy and broader diversity really help."

The memo distinguished between empathising with other people's feelings and analysing and constructing systems, and said coding is about the latter. But it requires both, as do most of the jobs that are growing in number and in wages, according to economic research.

Jobs that require a combination of math and social skills — like computer science, financial management and nursing — have fared best in the modern economy, found David Deming,

a professor at Harvard.

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It's true that programming can be a solitary activity in college computer science classes or entry-level positions.

But soon after, it's impossible to avoid teamwork — with the business or legal departments, but also with other engineers.

There's a joke in computer science that one of the hardest tasks is naming things in code. It's funny because it's a non-technical task. But it involves something that can be even harder than technical work: communicating with other people and intuiting what they might need and understand.

Computer programming was originally considered a woman's job. Women were programmers of the Eniac during World War II and at NASA, as shown in the film "Hidden Figures." That began to change when programming professionalised in the 1960s. The stereotype of an

eccentric genius who would rather work with machines than people was born, according to Nathan Ensmenger, a historian at Indiana University who studies the cultural history of the software industry.

Yet that was never an accurate description of the job. It was social from the beginning, in university computer labs and, later, Silicon Valley garages, he said. The social circle just didn't include women.

"For a lot of these young men, a certain computer culture becomes an expression of masculinity," he said. "These are people who aren't doing physical labor, aren't playing professional sports. But they can express their masculinity by intense competition, playing pranks on one another, demonstrating their technical prowess, in ways that don't translate well to mixed-gender environments."

The mythology of the anti-social programmer is self-perpetuating, said Yonatan Zunger, a senior engineering leader at Google until this month, when he joined Humu, a startup.

Early on, children who are less comfortable with social interaction — particularly boys, who are more likely to be socialized that way — are channeled toward science and engineering, he said. Teachers generally focus on the technical aspects and not the interpersonal ones. The result is a field filled with people who dislike social interactions and have been rewarded for it.

Google calls engineers who aren't managers "individual contributors." Technical skills are valued above soft skills or business skills. "Anyone who deals with a human being is considered less intelligent," said Ellen Ullman, a software programmer and author of a new book, "Life in Code."

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