

# 25 WAYS TO BE A MORE INCLUSIVE ENGINEER

*This list highlights 25 actions that individual engineers can take to be more inclusive as a complement to steps their employer is taking*

## Business Leadership

1. Be sensitive to the impact of micro-inequities. Pay attention to language and assumptions in daily conversations that may inadvertently reinforce stereotypes. Listen for and correct personality penalties in casual conversation. <sup>i</sup> Interrupt “fixed mindsets” talk by questioning language like “natural talent,” “born leaders,” “not leadership material,” “a leopard doesn’t change its spots,” or “either you’ve got that special something or you don’t.” <sup>ii</sup>
2. Encourage others to apply or ask for a certain position, award, or role. <sup>iii</sup> Never underestimate the power of simply encouraging others to take on a project or apply for a position you think they are qualified to do, <sup>iv</sup> but do so in ways that does not set people up to fail. <sup>v</sup>
3. Ensure that the ideas, solutions and approaches of women and men team members are given equal consideration and are not discounted because of gender. <sup>vi</sup> Ensure that credit goes to the originator of a good point and not just to

whoever talked the longest or the loudest or the person who repeated someone else’s idea. <sup>vii</sup>

4. If you supervise people, be honest and fair in feedback for employees of all genders. <sup>viii</sup> Create opportunities to have substantive discussions on performance in private. Do not withhold constructive feedback in the fear of hurting a woman’s feelings – it is ok for people of all genders to be emotional. Be fair and write reviews of the same length for both the men and women in your team. <sup>ix</sup>
5. Ensure that the administrative (and clean up, if relevant) tasks in your team are equally distributed amongst men and women. <sup>x</sup> Share the load. Set up rotations for tasks like taking minutes and other admin work so these don’t fall mostly to women. <sup>xi</sup>

## Process and System Leadership

6. Be inclusive in the products and processes you develop being mindful of their potential differentiated impacts on adults and children of all genders. <sup>xii</sup>
7. Proactively seek to expand and diversify your networks (online and offline). <sup>xiii</sup> Make a conscious effort to reach out to people, including of a different gender, who are different from you. <sup>xiv</sup>
8. Urge and support your organization to sign / align its policies and practices with the Women’s Empowerment Principles and implement the principles within your area of influence.

9. If you are in procurement, support adoption of equal opportunity/supplier diversity programs.
10. If you are in a hiring position, ensure diversity both in the candidates' pool and on the recruitment panel. Explain that you are doing so in order to obtain the benefits of diverse and inclusive teams.<sup>xv</sup>

### Development and Monitoring

11. Take up opportunities to mentor and sponsor<sup>xvi</sup> people of different genders and minorities.<sup>xvii</sup>
12. Do not simply remove a woman from an assignment if she is not given her due from a male client or not respected. Help her work through the situation.
13. Offer speaking opportunities to women and minorities at organizational events. Be sure that these individuals are invited to speak about technical topics, not only about diversity topics.<sup>xviii</sup>
14. Implement practices that give everyone a chance to think ahead of time (e.g., send specific questions or ideas for consideration ahead of the meeting).<sup>xix</sup>

### Empathy

15. Look for and take up opportunities to listen to and understand the experiences of others and how they may be different from your own.<sup>xx</sup>
16. Make space for women's and men's voices in team meetings,<sup>xxi</sup> client calls, and in all workplace arenas. Show empathy, listen and resurface points that were raised, but apparently not heard. Call out spaces where

women and minorities are absent so they don't have to do it. Make sure all genders are involved in the decision-making process. If quick decisions are made in hallways or offsite locations, check in with those not present, who should be.

17. Do not interrupt when a female team member is speaking during a meeting any more than you would for a male team member.<sup>xxii</sup> If you observe this happening, do raise it in the meeting or privately. Helpful action words – "I'd like to hear XXX finish her thought" or "XXX is the expert on this, let's hear from her."<sup>xxiii</sup>
18. Facilitate group discussion so everyone gets heard and reinforce the ground rule that "there are no bad ideas and stupid questions." Arrange the seating such that it promotes discussion and exchange.
19. If you are the person facilitating a meeting, it can be hard to keep track of all the contributions and directions. Invite a partner to be on the lookout for tracking who has spoken, where ideas originate, who wanted to contribute and did not get to, and so on. If you or colleague feel uncomfortable, find a meeting ally who can support you and help notice and call out subtle biases.<sup>xxiv</sup>
20. Avoid making assumptions about people because of their gender or family status, including as to their goals, needs, likes and dislikes, ability to travel, and ambition levels. Instead, simply ask them.<sup>xxv</sup> As a manager, don't assume everything is fine unless people complain to you. Make sure to proactively check in with your colleagues/team to ask about needs and concerns.

## Diversity and Inclusion Leadership

21. Make executives and others aware of the business case for increasing women and other underrepresented groups' participation.
22. Refer clients back to the female colleagues who are leading projects.<sup>xxvi</sup> If a client approaches you instead of the female staff member who actually led the project, steer the client towards her.
23. Enquire into the gender composition of events at which you are asked to speak. Encourage greater gender diversity. Decline invitations to speak at events with all-male or homogenous panels. Instead, offer to connect the organizers to female speakers. You can also make a particular effort to invite underrepresented groups to attend an event.<sup>xxvii</sup>
24. Press your leadership to collect and share data on the state of diversity within the organization.<sup>xxviii</sup>
25. Take up volunteer opportunities that support inclusion through the content of and participation in the project.

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<sup>i</sup> Research demonstrates that women experience "personality penalties" (e.g., negative feedback regarding their personality, style or tone) more often than men. Biases about race and class also result in different manifestations of these personality penalties. While these penalties often occur in formal performance evaluations, they also happen in casual hallway conversation or informal advice-giving, where any observer might intervene. National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*,

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<https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-usi-0#Tip1>. See also Victoria L Brescoll, Eric Luis Uhlmann, *Can an angry woman get ahead? Status conferral, gender, and expression of emotion in the workplace*, Psychological Science, March 1, 2008.

<sup>ii</sup> Research shows that, for the most part, talent and ability are not fixed or innate. Yet many technical organizations operate with a "fixed mindset" that either you have "what it takes" or you do not (Dweck, 2006). Fixed mindsets tend to exacerbate biases, as we tend to presume that those who are most like us or most like those who have been successful in the past are the ones who "have it." National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-usi-0#Tip1>. See also Carol S. Dweck, *Mindset: The New Psychology of Success*, Ballantine Books, December 2007.

<sup>iii</sup> A variety of factors make it more difficult to take risks or apply for new opportunities when one is a minority in a majority-group environment. One such reason is stereotype threat – the fear that our actions will confirm negative stereotypes about an identity group (e.g., gender, race, age) to which we belong. National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-usi-0#Tip1>. See also Steele, C. M., & Aronson, J., *Stereotype threat and intellectual test performance of African Americans*, *Journal of Personality and Social Psychology*, 69(5), 797-811, 1995.

<sup>iv</sup> National Center for Women & Information Technology, *Supervising-in-a-Box Series: Supervisors as Change Agents*, [https://www.ncwit.org/sites/default/files/resources/supervisingbox\\_changeagents\\_web07212015.pdf](https://www.ncwit.org/sites/default/files/resources/supervisingbox_changeagents_web07212015.pdf).

<sup>v</sup> This often happens when people are trying to promote underrepresented groups; it's a phenomenon called the "glass cliff," and it ultimately hurts both the employee and the company more than it helps. If an employee is not ready but we think they are a promising future leader, we need to let them know that, clearly articulate the steps they need to get to that point, and make it possible for them to take these steps. See Michelle K. Ryan and Alexander Haslam, *The Glass Cliff: Evidence that Women are Over-Represented in Precarious Leadership Positions*, *British Journal of Management*, Vol. 16, No. 2, pp. 81-90, June 2005. See also National Center for Women & Information Technology, *Supervising-in-a-Box Series: Supervisors as Change Agents*, [https://www.ncwit.org/sites/default/files/resources/supervisingbox\\_changeagents\\_web07212015.pdf](https://www.ncwit.org/sites/default/files/resources/supervisingbox_changeagents_web07212015.pdf).

<sup>vi</sup> Studies have shown pointing out gender differences, or lack thereof, can have an impact on individual performance. One study found that simply telling women that a math test does or does not show gender differences affected their test performance. When test administrators told women that tests showed no gender differences, women performed equally to men, those who were told the test showed gendered differences did worse than men, similar to women who were told nothing. All women in the experiment were top performers in math. Spencer, S. J., Steele, C. M., & Quinn, D. M. Stereotype threat and women's math performance. *Journal of Experimental Social Psychology*, 35, 4-28, 1999.

<sup>vii</sup> See Michelle Stohlmeyer Russell, et. al., *How We Closed the Gap Between Men's and Women's Retention Rates*, BOSTON CONSULTING GROUP (June 2017), <https://www.bcg.com/en-us/publications/2017/people-organization-behavior-culture-how-we-closed-the-gap-between-mens-and-womens-retention-rates.aspx>; Matt Krentz, et. al., *Five Ways Men Can Improve Gender Diversity at Work*, BOSTON CONSULTING GROUP (Oct. 10, 2017), <https://www.bcg.com/en-us/publications/2017/people-organization-behavior-culture-how-we-closed-the-gap-between-mens-and-womens-retention-rates.aspx>.

[us/publications/2017/people-organization-behavior-culture-five-ways-men-improve-gender-diversity-work.aspx](https://publications/2017/people-organization-behavior-culture-five-ways-men-improve-gender-diversity-work.aspx).

<sup>viii</sup> Differences have been reported in how men and women's performance is reviewed. See Paola Cecchi-Dimeglio, *How Gender Bias Corrupts Performance Reviews, and What to Do About It*, HARVARD BUSINESS REVIEW (Apr. 12, 2017), <https://hbr.org/2017/04/how-gender-bias-corrupts-performance-reviews-and-what-to-do-about-it>.

<sup>ix</sup> Reviews women receive have been shown to be on average shorter and include less guidance on how to get to the next level. See *id.*

<sup>x</sup> In a survey of 200+ women in leadership with 91% in the bay area/silicon valley, 47% have been asked to do lower-level tasks that male colleagues are not asked to do (e.g., note-taking, ordering food, etc.). *Elephant in the Valley (2015): Survey on CEO Women in Silicon Valley*, <https://www.elephantinthevalley.com>.

<sup>xi</sup> Evidence suggests that biases exist when it comes to who gets assigned (or who takes on) certain tasks or responsibilities. Sometimes this manifests in women taking on more organizing, note-taking, or relational kinds of tasks – what Williams (2014) terms “office housework.” See Joan C. Williams, Rachel Dempsey, *What Works for Women at Work: Four Patterns Working Women Need to Know*, NYU Press, January 17, 2014. See also National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-usi-0#Tip1>.

<sup>xii</sup> If you have people thinking about gender within the design of their products and services, that brings in a new level of thinking and shifting of mindsets. A transformative workforce and industry would be one that is more inclusive and people centered not only in their composition but in whose interests, they are serving. See Stanford University, *Gendered Innovations Engineering Checklist*, [https://genderedinnovations.stanford.edu/methods/engineering\\_checklist.html](https://genderedinnovations.stanford.edu/methods/engineering_checklist.html).

<sup>xiii</sup> Providing role models for people from their group engaging in various fields and activities are more likely to think they can do the same thing. One study showed that women who read about other women's success in various professional fields, many heavy in math and sciences, performed better on a mathematics test than those who didn't. McIntyre, R. B., Paulson, R., & Lord, C., *Alleviating women's mathematics stereotype threat through salience of group achievements*, *Journal of Experimental Social Psychology*, 39, 83-90, 2003.

<sup>xiv</sup> Our networks tend to look like ourselves See, e.g., Rick Klau, *My unconsciously biased address book*, BEYOURSELF (Oct. 1, 2015), <https://byrsf.co/my-unconsciously-biased-address-book-90a3d35bceee>.

<sup>xv</sup> “Word-of-mouth” recruiting efforts greatly exacerbate the tendency to reproduce the status quo since people tend to recommend others much like themselves. National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-usi-0#Tip1>.

<sup>xvi</sup> “Sponsor” underrepresented groups on the technical career path; note that this is not the same as mentoring. Sponsoring involves actively making someone's accomplishments visible in contexts where it counts. National Center for Women & Information Technology, *Supervising-in-a-Box Series: Supervisors as Change Agents*, [https://www.ncwit.org/sites/default/files/resources/supervisingbox\\_changeagents\\_web07212015.pdf](https://www.ncwit.org/sites/default/files/resources/supervisingbox_changeagents_web07212015.pdf).

<sup>xvii</sup> Although 74% of women in technology say that they love their work, 56% leave by the time they reach the mid-level (approximately somewhere between 10-20 years in a career). One of the reasons for the leave is that the lack of mentors, sponsors & professional development opportunities. National Center for Women & Information Technology,

*Supervising-in-a-Box Series: Supervisors as Change Agents*, [https://www.ncwit.org/sites/default/files/resources/supervisingbox\\_changeagents\\_web07212015.pdf](https://www.ncwit.org/sites/default/files/resources/supervisingbox_changeagents_web07212015.pdf).

<sup>xviii</sup> National Center for Women & Information Technology, *NCWIT Tips: 13 Tips to Make Technical Conferences More Inclusive*, <https://www.ncwit.org/resources/ncwit-tips-13-tips-make-technical-conferences-more-inclusive-0>.

<sup>xix</sup> National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-usi-0#Tip1>.

<sup>xx</sup> Be mindful, however, of Tokenism. Tokenism includes comments or actions that suggest that one person can speak for or relate to an entire identity group. The reality is that a wide range of variation exists within any identity group and that it is unreasonable to expect one person to represent this within-group variation; for example, rarely do we expect a white person to speak for all whites or a man to speak for all men. National Center for Women & Information Technology, *Supervising-in-a-Box Series: Supervisors as Change Agents*, [https://www.ncwit.org/sites/default/files/resources/supervisingbox\\_changeagents\\_web07212015.pdf](https://www.ncwit.org/sites/default/files/resources/supervisingbox_changeagents_web07212015.pdf).

<sup>xxi</sup> Data has shown men tend to dominate meeting discussions on average, speaking for 75 percent of the allotted time. See Christopher F. Karpowitz, Tali Mendel Berg, *The Silent Sex: Gender, Deliberation, and Institutions*, Princeton University Press, August 2014. See also Eddie Wrenn, *The great gender debate: Men will dominate 75% of the conversation during conference meetings, study suggests*, DAILY MAIL (Sept. 19, 2012), <http://www.dailymail.co.uk/sciencetech/article-2205502/The-great-gender-debate-Men-dominate-75-conversation-conference-meetings-study-suggests.html>.

<sup>xxii</sup> When women do speak out, they can be ignored, passed off, ridiculed, shunned, or have their ideas taken. See Sarah Granger, *Want to Be an Ally to Women at Work? Here Are Five Things Men in Tech Have Been Doing*, SLATE (Jan. 8, 2018), [https://amp-slate-com.cdn.ampproject.org/v/s/amp.slate.com/blogs/better-life-lab/2018/01/08/want-to-be-an-ally-to-women-at-work-five-things-men-in-tech-have-been-doing.html?amp\\_js\\_v=0.1&usqp=mq331AQGCAEoATgB#origin=https%3A%2F%2Fwww.google.com&prerenderSize=1&visibilityState=prerender&paddingTop=54&p2r=0&horizontalScrolling=0&csi=1&aoh=15296194237973&viewerUrl=https%3A%2F%2Fwww.google.com%2F&mp%2Famp.slate.com%2Fblogs%2Fbetter-life-lab%2F2018%2F01%2F08%2Fwant-to-be-an-ally-to-women-at-work-five-things-men-in-tech-have-been-doing.html&history=1&storage=1&cid=1&cap=swipe%2CnavigateTo%2Ccid%2Cfragment%2CreplaceUrl](https://amp-slate-com.cdn.ampproject.org/v/s/amp.slate.com/blogs/better-life-lab/2018/01/08/want-to-be-an-ally-to-women-at-work-five-things-men-in-tech-have-been-doing.html?amp_js_v=0.1&usqp=mq331AQGCAEoATgB#origin=https%3A%2F%2Fwww.google.com&prerenderSize=1&visibilityState=prerender&paddingTop=54&p2r=0&horizontalScrolling=0&csi=1&aoh=15296194237973&viewerUrl=https%3A%2F%2Fwww.google.com%2F&mp%2Famp.slate.com%2Fblogs%2Fbetter-life-lab%2F2018%2F01%2F08%2Fwant-to-be-an-ally-to-women-at-work-five-things-men-in-tech-have-been-doing.html&history=1&storage=1&cid=1&cap=swipe%2CnavigateTo%2Ccid%2Cfragment%2CreplaceUrl).

<sup>xxiii</sup> Women are more likely to be interrupted. Two studies, one led by a sociologist in 1975 and the second later replicated by linguist in 2014, both found that women were significantly interrupted more than men. See Don Zimmerman and Candace West, *Sex Roles, Interruptions and Silences in Conversation*, Department of Sociology, University of California, Santa Barbara, 1995 (<http://web.stanford.edu/~eckert/PDF/zimmermanwest1975.pdf>). See also Adrienne B. Hancock, Benjamin A. Rubin, *Influence of Communication Partner's Gender on Language*, *Journal of Language and Social Psychology*, May 11, 2014. See also *The Universal Phenomenon of Men Interrupting Women*, NY TIMES (June 4, 2017), <https://www.nytimes.com/2017/06/14/business/women-sexism-work-huffington-kamala-harris.html>; Tonja Jacobi and Dylan Schweers, *Justice, Interrupted: The Effect of Gender, Ideology and Seniority at Supreme Court Oral Arguments*, 103 VA. L. REV. 1379 (2017), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2933016](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2933016) (finding that even male justices on the Supreme Court of the US interrupt the female justices approximately three times as often as they interrupt each other during oral arguments).

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<sup>xxiv</sup> National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-using-today>, #Tip1.

<sup>xxv</sup> The evidence shows that women are just as ambitious and eager to take on leadership roles as men, and that the culture in which they work determines whether they stay at an organization. For example, a male manager's well-intentioned move to "help" a new mother by taking her out of contention for an international job assignment may instead end up adversely affecting her career. (Besides, nobody is likely to do the same for a new father.) See Matt Krentz, et. al., *Five Ways Men Can Improve Gender Diversity at Work*, BOSTON CONSULTING GROUP (Oct. 10, 2017), <https://www.bcg.com/en-us/publications/2017/people-organization-behavior-culture-five-ways-men-improve-gender-diversity-work.aspx>.

<sup>xxvi</sup> People tend to recommend others much like themselves. National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-using-today>, #Tip1. See also Lauren A. Rivera, *Hiring as Cultural Matching: The Case of Elite Professional Service Firms*, *American Sociological Review* 77(6)999–1022, 2012. (<http://www.asanet.org/sites/default/files/savvy/journals/ASR/Dec12ASRFeature.pdf>).

<sup>xxvii</sup> National Center for Women & Information Technology, *Start Small, Start Now: Seven Bias Interrupters Male Allies (Or Anyone Really) Can Start Using Today*, <https://www.ncwit.org/resources/start-small-start-now-seven-bias-interrupters-male-allies-or-anyone-really-can-start-using-today>, #Tip1.

<sup>xxviii</sup> Without data on workforce diversity, organizations cannot correctly identify problems and develop appropriate solutions (Data2X (2017). *Gender Data: Sources, gaps, and measurement opportunities*, <http://www.data4sdgs.org/sites/default/files/2017-09/Gender%20Data%20-%20Data4SDGs%20Toolbox%20Module.pdf>; Giovannini, M. (2004). *What Gets Measured Gets Done - Achieving Results Through Diversity and Inclusion*, *Journal for Quality and Participation*, Vol. 27, No. 4, pp. 21-27). One Australian study found a relationship between reporting of diversity data and percentage of women on boards - the more comprehensive the diversity data was, the higher the proportion of women (The 30% Club (2016). *ASX 200 Director Snapshot* [https://30percentclub.org/assets/uploads/05925-COMS-30-ASX200-Skills and Experience A4 WEB.PDF](https://30percentclub.org/assets/uploads/05925-COMS-30-ASX200-Skills%20and%20Experience-A4-WEB.PDF)).