

# Mitigating Implicit Bias as a Leader

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Bias. It's a word that makes most of us squirm. Bias implies to us that we are "bad people" and are being accused of deliberately discriminating against others. Yet, if you ask a social scientist, you will find that it doesn't mean that at all; implicit bias is a neurologically based, energy-saving short cut.<sup>1</sup> Our brains apply mental models to make thousands of quick decisions every day: which brand of milk to buy at the store or when to turn the wheel to avoid a traffic accident. We form our implicit biases subconsciously over time, influenced by our upbringing, societal norms, and life experiences.

While benign in the above examples, when relied on for decisions regarding people, implicit bias can inadvertently cause us to exclude others, tune out their ideas, or under- or overestimate their abilities. When we interact with someone who doesn't "match" our mental model for that role, we unconsciously think of them as having lower potential; likewise when someone reflects our mental model, we give them more credit than is due.<sup>2</sup> In the workplace, we can even formalize our biases into preferred criteria for job candidates—criteria that are not critical for success in the job but mirror the skills or experiences of those that held the job in the past. As engineers and scientists, our value system is one of meritocracy, yet we cannot truly reach that ideal unless we commit to actively addressing, or

mitigating, our biases, both individually and institutionally.

## Diversity, Engineering, and Inclusion

Engineering, as a discipline, has solved some of the world's most complex problems. These solutions often require the most creative, innovative approaches we can muster and for that, the overwhelming evidence shows that we need diverse teams with diverse thoughts: diversity of thought that comes not only from different educational backgrounds, but from different upbringings, different ethnicities, different genders, and different life experiences.<sup>3-5</sup>

There's a distinction, however, between simply inviting diversity to the table and taking full advantage of it by *including* diverse individuals and their ideas. Without acting to counter them, implicit biases serve as a barrier to inclusion. Left unmitigated, they can cause us to seek or integrate input only from a select few, to overlook the potential of others, and even to dismiss otherwise brilliant ideas. This, in turn, can cause diverse individuals to feel undervalued, dismissed, and excluded.

Take a moment to recall a time you felt like an outsider—perhaps even a childhood experience on the playground. Did you feel like your full self? Likely not. In fact, evidence shows that when we feel we don't belong, we are less creative, less engaged, and less likely to remain loyal to the organization.<sup>6</sup> Yet, the converse is also true: we can significantly bolster our collective innovation, productivity, and sustained knowledge base by creating an inclusive culture where individuals feel they belong, thus enabling engineering as a field to reach its full potential.

Admittedly, the idea of mitigating bias

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can sound overwhelming. How can you possibly notice all of your biases and, even if you see them, what are you supposed to do about them? Luckily, there is an abundance of data on how to do this. In this article, we describe three of the most impactful and straightforward things you can do today to help mitigate bias: ensure rigor and consistency in people decisions, cultivate inclusion around you, and stay curious about diversity.

### Ensure Rigor in People Decisions

One of the most effective ways to mitigate bias with hiring, performance evaluations, and promotions is to decide ahead of time—before we’ve begun to look over resumes or details—what criteria will directly measure excellence. Most of us have seen or heard of examples where someone didn’t fit the mold: someone with seemingly low pedigree wildly exceeded everyone’s expectations, or someone with all the pedigree in the world never lived up to expectations.

Deliberately defining and adhering to a structured approach prevents us from allowing our criteria to slide based on the candidates we see;<sup>7</sup> overweighing ancillary criteria that are not relevant to success in the role;<sup>2</sup> or being so impressed with one skill that we do not explicitly evaluate across all of the other criteria.<sup>2</sup> We recommend that you consider adopting the following tangible suggestions:

- When recruiting, ensure that your applicant pool reflects the diversity of availability. If it does not, reconsider where to target your talent searches, how the posting is worded, and how and where you are advertising the posting.<sup>8</sup>
- Be aware that women and minorities may have a tendency to self-select out of bidding if they don’t match all of the listed criteria, whether required or desired.<sup>9</sup> It’s best to list only the most important criteria in the posting.
- Create a rubric to avoid rushed decision processes or defaulting to a “gut reaction” that may in fact be aligned to stereotypes, and then justifying the decision based on plausible, but inherently biased, criteria.

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- Avoid relying on indirect indicators (for example, pedigree) in evaluations. Seek direct evidence of excellence and recognize that attributes such as perseverance and grit may matter much more.<sup>10, 11</sup>
- Using “culture fit” as a criterion for selection can be a flag for bias. Essential attributes of the organization’s culture must be explicitly defined prior to including fit as a criterion. Otherwise, determining “fit” may rely on a gut reaction triggered by implicit biases.
- With promotions and performance, recognize that there is more than one path to success. When evaluating others, question yourself if you note that you are turned off based on a career path that is non-traditional or that does not match the pattern you’ve been conditioned to look for.
- Regularly educate yourself and your decision-making teams on common biases. Many universities, for example, now provide bias education not only to faculty recruitment committees but also to tenure and promotion review committees each year.

### Cultivate Inclusion on Your Teams

As with other diversity competencies, mentioning inclusion can draw blank stares. How do you do that—create more inclusion? Building inclusion boils down to some of the very things we value in others and that we know improve the performance of teams. While there are several references that go into this topic more deeply,<sup>12, 13</sup> we have put together the following list of actions that we can all commit to today:

- Disparaging comments from co-workers may seem like harmless banter, but in fact can erode confidence and aren’t appropriate



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to establishing positive workplace dynamics.<sup>14</sup> Rather than dismiss these (for example, by saying or thinking, “Don’t let it get to you”), articulate the impact of such comments and set expectations across the team to ensure that all team members feel valued and respected.

- Pay attention to meeting dynamics and be willing to intervene. Take notice when someone wants to contribute, and invite them to speak. Also, speak up when credit is being misattributed by saying something like: “That’s a great idea, and it echoes what *so-and-so* suggested a minute ago.”
- Evaluate who is on your “go-to” list and find opportunities for those without these experiences to take on new roles. Give them the training or tangible feedback needed to prepare them for success.
- Celebrate team success. One of the easiest things you can do to build inclusion and help everyone feel valued is to nurture a culture of recognizing each other for a job well done. Take the time to go out to lunch; celebrate a paper being published; or send a congratulatory e-mail to acknowledge the impact of new results.
- Finally, don’t forget the little things, like introducing yourself to a new conference attendee; letting someone know when they give a nice talk; and introducing folks to each other when given the chance and “vouching” for them by explaining why the person is valuable (for example, you could say, “I’d like you to meet *so-and-so*, a talented and up-and-coming member of my team”).

Remember that even small negative experiences build over time, and the cumulative impact can be just as painful as an acute experience of discrimination. When you do your part to build inclusion while pushing yourself to combat exclusionary actions<sup>15</sup> you may feel uncomfortable at first, but your teams will ultimately be much more engaged and productive as a result.

### **Leverage Your Inherent Scientific Curiosity**

It’s an interesting paradox that engineering and art are often considered so separately. By segregating these in our minds, we can fall into thinking that “squishy” concepts like diversity and inclusion are likely an art when the truth is, there is a lot of science behind these concepts. We have more data and evidence now than ever before on the concrete actions (such as those outlined in this article) and organizational approaches<sup>16, 17</sup> that have the most impact, and there are ample resources available to further our expertise in this area, just as with any other scientific discipline (see the Endnotes for an excellent reading list<sup>18</sup>).

In order to continually realize innovation and impact, we must stay open to change. The day we stop learning and being curious about how to make our environment more inclusive is the day that our organizations become stagnant. One foundational piece is understanding and celebrating different cultures, different races, different genders, and different world views.<sup>19</sup> As a starting point, try reaching out and networking with people who are “not like us.” Doing so does two things: it challenges our assumptions about others in order to retrain our own biases, and it helps others feel included and valued for their differences.

Taking this advice is partly responsible for how we, as co-authors, became friends. Although we are both women in engineering, as we shared our experiences it was clear that the experience of a woman of color is very different than that of a white woman. We cannot assume we “know how it is” because we share one attribute. We

need to stay curious, ask each other about experiences, and educate ourselves on important topics as we move forward. As with all things new, it may feel awkward at first. For example, asking a transgender person if they have a preferred pronoun is not likely a skill we were taught early, but it can go a long way in making people who might otherwise feel excluded feel they are seen and valued for who they are.

We cannot reverse the adverse effects of implicit bias by being simply aware, but by thoughtfully assessing our work environment and everyday actions we can ensure we are including, respecting, and valuing the contributions of everyone.

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