

# NIVEDITA ARORA | DIVERSITY STATEMENT

In a world that systematically creates differentiators and inequities amongst its people, I understand how significant the presence of a diverse, inclusive, and equitable learning and working environment has been in my development as a researcher and mentor. Below are some anecdotes that have shaped my character and purpose.

## 1. Consistent commitment toward diversity, equity, and inclusion

I am an international student and will be the first female in my extended family to earn a Ph.D. degree. I come from a conservative patriarchal family in India, where after completing an undergraduate degree, a woman's further education or dreams of having a successful career are deemed unnecessary. My undergrad engineering university's heavily skewed male-to-female (8:1) ratio could not deter me from learning computer science with passion. I built Android apps that topped the Google Play Store with millions of downloads, and I encouraged other females to do so as well. But it hit me very hard when there was resistance from my own family to work or study any further after undergrad. Over the years, I have learned to heal from such limiting beliefs. I have found the strength to speak up, educate my family, and use my voice responsibly to support others in a similar position. Today, one big reason I am a confident woman with healthy self-esteem is Georgia Tech's and UbiComp Group's consistent commitment to the core ethos of diversity, inclusion, and belonging. For the first time in my life, it provided me with a safe and stable environment where my ability and potential were not judged based on my gender. I felt accepted, seen, heard, and eventually healed through consistent support. I recognize that such societal and generational traumas are not unique to me but are shared by individuals of many other underrepresented groups. It can put them at a disadvantage psychologically, intellectually, or physically. As a future faculty member, I consider it my utmost responsibility to promote a diverse, equitable, and inclusive learning environment in my classroom and lab. Below are some of my DEI efforts while in graduate school.



**Figure 1:** Broadening Participation Workshop during the ACM UbiComp Conference

**Diversity:** I co-organized a day-long **Broadening Participation Workshop during the ACM UbiComp Conference in 2018** in Singapore (Figure 1). The workshop was designed to support women researchers and those from underrepresented countries. It provided them an opportunity to network and get feedback about their work from experts in the ubiquitous computing field. We held panel discussions, a talk on work-life balance, and a poster session. One of my personal highlights from the workshop was the change of opinion of a white male professor. Initially, when I requested him to be a mentor, he was hesitant and unsure of his role in a diversity workshop. Later, he acknowledged that it was vital for him to be part of the diversity dialogue and how he learned a lot from the students he interacted with about their struggles.

**K12 STEM education:** I have been part of Georgia Tech's **Girls Who Code** chapter, where I taught weekly Arduino workshops at Grady High School, Atlanta. My focus is igniting high school girls' interest in STEM and inculcating values of fearless dreaming and confidence. As a result, one of the students I mentored is now a CS major at Georgia Tech.

**International Students:** International students face a substantial cultural shift when starting their education programs. I helped kick off the first **Georgia Tech Graduate Leadership Program (GT GLP)** in the fall of 2018. I mentored a group of 20 incoming graduate students throughout their first semester by providing knowledge of resources available on the campus, conducting weekly check-ins to ensure a smooth transition through graduate life, and organizing group activities that fostered friendships. As a mentor, I am committed to encouraging students to think about how their identity and background are their strengths. I have guided several international undergraduate students in their graduate school application process, especially females from Indian universities. They are now students at prestigious universities like UPenn and MIT. As part of my research on sustainable computing, I have also interacted with and mentored diverse groups of students at the HackGT hackathon, UROP, UbiComp Lab, and MS HCI program in various capacities.

**Accessibility:** I have been an **accessibility student volunteer** at the ACM UbiComp conference. I have also adopted such an ethos in my research. As a master's student, I worked on the democratization of the assistive technology platform used by Prof. Stephen Hawking with Intel Research Lab. I created an adaptive input control system that persons with varying degrees of neuromuscular degeneration and tremors could quickly adopt. I regularly visited and worked with people at Tools for Life, Georgia's Assistive Technology Act Program to test this technology. I have also worked with persons with ALS to build a

miniaturized, ear-based Brain-Computer Interface (BCI) system that was more comfortable to wear than a traditional electrode cap. For all these efforts in assistive technology, I was **awarded the Faces of Inclusive Excellence Award** in 2015.

## 2. Treating mental health as an equity issue

I have always been a hard-working, driven person with a positive attitude. While I may have faced obstacles, they were never debilitating enough to come in the way of living a healthy and happy life or making daily progress. But for about six months during my Ph.D., all this changed when I faced considerable mental health struggles. Previously, my 101% effort could skyrocket any project's progress; now, all it resulted in was getting out of bed. My mind was foggy. I was anxious, in emotional pain, and had panic attacks. These mental health struggles were far more challenging than anything I had faced in my entire life. I was encouraged by my advisors to seek therapy. After a slow and steady recovery, I am now a better version of myself than before experiencing mental health struggles. It was pivotal that my Ph.D. advisors were experienced in handling such situations. They were patient and encouraging and had constant belief in my abilities. I realized that **academic faculty should have dynamic and diverse resources and experiences at their disposal to support diverse student needs**. During my journey, I established strong, healthy, and supportive life processes. This knowledge will be helpful for me to be empathetic and supportive of students struggling with life or mental health. I initially feared judgment when I shared my experiences with labmates and friends. But as I started talking, I soon realized sadly that having mental health struggles as a graduate student is far more common than most people would want to accept or even talk about. It is of utmost importance to talk about mental health in the diversity statement for a tenure-track faculty position. With a pandemic and war still raging in our lives, too many students are experiencing isolation; they grieve for lost family members; many international students have not gone home in the last few years. It raises the question of **how can we do better as an academic community to support the mental health of our students [1]**?

### Future Diversity plans

Over the years, my personal experiences and interactions with other underrepresented community members have made me deeply empathetic and driven to be part of DEI and mental health initiatives. I have highlighted my plans as a faculty member in three main thrusts:

**Inclusive computing research/teaching:** I will use inclusive and gender-neutral language in my teaching. I will also highlight in my lectures achievements by women as well as BIPOC (Black, Indigenous, and People of Color) scientists, which I feel are often overlooked. Middle school is when young girls start losing interest in science. I plan to be active in K12 STEM education by organizing workshops and talks for students and their parents.

**Mentorship:** I will promote an inclusive lab culture and a safe environment where students work, develop, learn to mentor and, if necessary, seek support. At Georgia Tech, a one-credit freshman seminar introduces students to ethics, diversity, and mental health resources as well as inspiring research topics and researchers. I would be interested in helping create a similar seminar. In addition, the barrier to going to a therapist is often high for a student. Thus, I plan to get safe-talk-space training to encourage students to reach out to me for candid conversation and support if necessary.

**Workshop, writing, and podcasts:** There is a quote by aboriginal activist Lilla Watson, "If you have come here to help me, you are wasting your time. But if you have come because your liberation is bound up with mine, then let us work together." Just like Lilla, I view DEI from the lens of community building. I will continue my efforts in Broadening Participation workshops, extending them to conferences in my more hardware-focused disciplines, where diversity often suffers. I will undertake myself and encourage my students to participate in diversity initiatives to be responsible global leaders and researchers of tomorrow. As a woman faculty member, I consider it my responsibility to support and expand the existing Women in CS/ECE community. I also hope to use writing and podcasts to amplify my voice of support for DEI initiatives.

Finally, I consider being a faculty member as an opportunity and a position of great responsibility. I am committed to creating an equitable teaching and research environment for students across diverse backgrounds in gender, physical ability, mental health, race, culture, economic status, and nationalities.

[1] <https://www.chronicle.com/events/virtual/the-mental-health-crisis-on-campus>