

Diversity, Equity and Inclusive Statement

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Throughout my academic journey, I have had the distinct pleasure of working within inclusive environments, both at my Ph.D. group at KTH in Sweden and my Postdoctoral group at CMU in the United States. These experiences have exposed me to excellent colleagues from diverse backgrounds. Within our research groups, I have had the privilege of teaching and collaborating with individuals from the United States, Chile, Argentina, Brazil, Ecuador, India, Sri Lanka, Iran, China, France, Sweden, Italy, Portugal, etc. These diverse cultures, perspectives, and experiences have fostered an environment of mutual respect, intellectual exchange, and meaningful collaboration. In this diversity statement, I feel happy to share my experiences with work with my excellent colleagues regarding diversity, equity, and inclusion.

Diversity. My academic journey has taken me to various corners of the world, studying and working in diverse cultures and perspectives. From Finland during my master's studies to Sweden for my graduate research and the United States as a postdoctoral fellow, I've relished the opportunity to embrace diverse communities and engage with individuals from all walks of life.

My research experiences in multicultural research environments have been enriching. During my Ph.D. and postdoctoral research, I have collaborated with researchers from all over the world. One such project, "A software-repair robot based on continual learning," brought together a team of brilliant minds from Argentina, Ecuador, Italy, Iran, France, Sweden, the United States, and China. This diverse group produced excellent research to be published in IEEE Software. Working with individuals from diverse backgrounds initially presented challenges in communication, cultural, and time zone differences. For instance, reaching a consensus during decision-making processes can be time-consuming, as different cultures prioritize different aspects. To address these challenges, I propose a rotating leadership structure where each team member takes turns leading a meeting, fostering open communication among all team members to encourage the expression of diverse perspectives. Following a thorough discussion, we conducted a vote to determine the majority decision, ensuring that all aspects are considered and that the decision-making process is efficient and inclusive.

In my experiences as a teaching assistant (TA), I taught students of diverse ages, countries, and beliefs. Among them, one student who particularly inspired me was an over-60-year-old undergraduate student who had recently retired from a career in mechanical engineering, and enrolled in the database course I was teaching as a TA. However, due to his lack of CS background, I decided to provide him with tailored instruction in fundamental CS to bridge the knowledge gap. Additionally, I invited him to actively participate in weekly Q&A sessions to talk with me and his peers. Interestingly, he became a valuable contributor to the class, sharing his unique insights on database design, drawing from his mechanical engineering background. In this experience, I discovered that not only was I helping him succeed in the course, but he also inspired and encouraged me to embrace lifelong learning. This is the mutual encouragement fostered by diversity.

Diversity in academia for me is extremely important, reflecting fairness and equal respect for all individuals. I firmly believe that everyone, regardless of their background, should have the opportunity to explore their research interests. Biased favoritism should not hinder the pursuit of knowledge. As a future faculty member, my goal is to cultivate an inclusive academic environment that embraces individuals from all backgrounds.

Equity. Throughout history, women have been underrepresented in the field of computer science (CS). As a woman in CS, I am passionate about encouraging more women to pursue this field. I have supported and guided two female undergraduate students through their Ph.D. application processes, and I have the privilege of mentoring and working with diverse female researchers.

I am proud to have assisted two female undergraduate students in applying for Ph.D.s in the field of CS. Niloofar, a bright and enthusiastic undergraduate student, joined our research group three years ago as an intern to explore the field of code pattern mining, where I provided her with guidance and

mentorship throughout the project. During this time, Niloofar discovered that her true research interest is artificial intelligence (AI), rather than software engineering (SE). I encouraged and guided her through the process of pursuing a PhD in AI. I helped her search for research positions online and collected a comprehensive list of potential professors aligned with her interests. I encouraged her to proactively seek potential opportunities and express her interest to professors before positions even open. I carefully guided her through every step of the application process, from crafting compelling research proposals to preparing for interviews. Today, I am proud to see that Niloofar has been admitted as a doctoral student at McGill University in Canada. I helped another female undergraduate Sofia to apply for a PhD at KTH.

I have mentored female students throughout their research. I supervised Abgeiba's Master's thesis at KTH, providing her with the mentorship and guidance she needed to complete her research. I mentored Cláudia at CMU through her Ph.D. research, helping her navigate the challenges of her research topic and contribute meaningfully to her field. I have collaborated with inspiring female colleagues on various research projects. My Postdoctoral supervisor, Claire, has been a constant source of guidance and support, her expertise and mentorship shaping my research approach. My close colleague Deepika has been a valuable collaborator, her unique perspectives and insights enriching our research endeavors.

I actively support women in academic activities to attend the Ada Workshop and women's breakfast meetings in FSE 2022 to connect with other excellent women researchers. To promote the visibility of women in computer science, I regularly invite female researchers to present at our group's seminars, showcasing their expertise and contributions to the field. For instance, I reached out to many female researchers and invited them to give presentations in our department to share their research insights. Additionally, I consistently organize women's lunches to share my experiences with junior female Ph.D. students, providing them with mental support and guidance on solving the problems of research pressure, family responsibilities, and age anxiety.

Beyond gender inequities, inequities in academia also exist for underrepresented minorities. The aforementioned female students I supervised and worked with are from Brazil, Iran, Chile, India, and Portugal, which are underrepresented minorities in the history of CS. I have also worked with colleagues from Cuba, Ecuador, and Sri Lanka. I keenly understand the challenges they face in their academic careers as underrepresented minorities, which motivates me to provide them with the utmost support they need to achieve their goals. I invited them to many academic and social activities. Upon joining our group, I was always happy to welcome them by providing them with a campus tour and introducing them to colleagues to help them quickly establish connections. I will continue to foster a supportive and inclusive environment for underrepresented minorities

Inclusion. I believe that true inclusion extends beyond merely accepting individuals from diverse backgrounds. The fundamental distinction between diversity and inclusion lies in respect and appreciation. Inclusion encompasses valuing and respecting unique perspectives and creating an environment where individuals feel comfortable and valued. An inclusive environment fosters psychological well-being, encouraging individuals to contribute their best work and commit to collective success.

When organizing seminars for Master's students, I noticed students tend to group themselves based on nationality. To promote cross-cultural exchange, I introduced a strategy of randomly swapping half-group members after they finished part of the discussion, encouraging interaction from different cultures. To promote active participation, I always encourage students to present their group discussions to the entire class by properly representing all perspectives from their group members. This approach enhanced engagement, broadened perspectives, and fostered a sense of community.

At both KTH and CMU, I regularly organize social activities, such as badminton, table tennis, and potluck gatherings. In the monthly potluck, I invited all colleagues to bring foods from their respective cultural backgrounds, which is an excellent platform for underrepresented minorities to showcase their traditions and customs, fostering a welcoming and inclusive environment that embraces the diversity of our workplace.

As a future faculty member, I would build on my previous experiences to take an active leadership role in fostering diversity, equity, and inclusion. For teaching, I will prepare lecture materials with sensitivity and respect for all cultures and beliefs. I will consider the diverse backgrounds and different knowledge levels of my students to ensure each of them are able to follow and benefit from the lectures. I strive to create an inclusive learning environment where all students feel comfortable participating and actively engaging with the material. Specifically, I plan to make the most of my open office hours to connect with my students and seek their feedback for my teaching. I listen to students' feedback and incorporate their perspectives to adjust and improve my teaching approaches to ensure that my lectures are effective and inclusive for all learners.

Fairness and non-bias are fundamental for me to create an inclusive working environment. I am committed to patiently listening to, genuinely caring for, and fully supporting my students without prejudice or favoritism. I am passionate about mentoring and supporting underrepresented minority students and researchers to help them thrive. I advocate for and will participate in inclusive hiring practices that promote diversity within academia. I believe that by diversifying the pool of faculty and researchers, we can create a more representative and equitable academic community. I strive for a career in achieving excellence through equity, diversity, and inclusion. It is through this lens that we make a profound impact on society and the world.