Diversity Statement

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I am very committed to broadening diversity at Boston University. I would like to share my perspective and contributions to diversity through research, teaching, and professional activities.

I was one of two women students in my undergraduate studies in Electrical Engineering at Sabanci University in Turkey. Later, during my graduate studies, unfortunately, the number of female students dropped; I was the only woman in my research group at Columbia University. I was selected among the top 61 women graduate students and postdoctoral scholars invited to participate and present my research work in the 2015 MIT Rising Stars in Electrical Engineering and Computer Science (EECS) created by Professor Anantha P. Chandrakasan. Attending the Workshop was a great privilege and a wonderful opportunity. I was able to meet top women peer researchers studying electrical engineering and computer science to discuss aspects of life in academia and formed connections that will flourish throughout our careers.

The keynote speaker of Rising Stars in EECS, the late Professor Emerita Mildred Dresselhaus, emphasized the importance of persistence in academia as it reflected through her career. Taking her advice strongly to heart, I have learned to overcome obstacles in my career through dedication and perseverance. Additionally, this workshop opened a door for me and gave me a chance to build upon my research qualifications and leadership skills. Through my presentation at the workshop, I was invited to join MIT as a postdoctoral researcher to work with Professor Anantha P. Chandrakasan. Workshops and other activities like this provide valuable opportunities to support and inspire members in underrepresented communities. I aspire to continue providing career development support and mentoring for underrepresented communities in STEM derived from learned experiences as a member of this group.

With my aim of building a diverse community, I have mentored three women Ph.D. students (one defended her Ph.D. thesis in December 2023), two women M.S. students, seven women ECE and BME undergraduate students through the BU's Undergraduate Research Opportunities Program (UROP) and DoD-funded STEM Pathways Program, and an undergraduate student from the BU chapter of the National Society of Black Engineers (NSBE). In addition to building this community, I really advocate for my students' successes in the classroom, laboratory, and world. Particularly, at every opportunity, I nominate them for awards and workshops (e.g., two women students were selected as *2024 IEEE Solid-State Circuits Society (SSCS) Rising Stars*; one woman student was selected for the *2023 IEEE SSCS Predoctoral Achievement Award*), while also providing them with networking and career opportunities. For all of my students and advisees, I am an "open book" and have an "open door" for their questions and needs.

My goal has always been to inspire their curiosity and foster their efforts to work on interdisciplinary research in my laboratory. Not only were these relationships and research projects successful on paper (e.g., publications co-authored by those students), but they also inspired the students to continue their scientific careers in their next steps. Frequently, I share my own experience in science and academic journey with the students to provide them comfort and confidence that they can achieve it too. As a result, Yidi Wu (ECE'23), a women undergraduate, is currently pursuing her graduate studies at Georgia Tech. I also mentored Elizabeth Diamond (ECE'22) starting her freshman year until her graduation (four years) to develop miniaturized ingestible capsules published in the IEEE Custom-Integrated Circuits Conference 2021, in which she was selected as one of the *IEEE SSCS Next-Gen Circuit Designers* in 2022. Additionally, I have contributed to several other outreach events by designing activities and presenting my research and career path, including the 2022 Calculus Project targeting 20-25 historically underrepresented high school students,

the BU STEM Pathways Program Mini Jamboree, and Research Soundbites at Howard University NSBE chapter. For this, I co-developed a DIY "Operation Game" for underrepresented high school students, for which the goal was to spark their creative and scientific interests by blending human health with electronics in a fun environment.

To reach a broader community, I became an active member of the IEEE SSCS Women in Circuits (WiC) Committee in 2016. The goal of the committee is to increase female recruitment, retention, and advancement within SSCS, where only **5% of society members were women in 2021**. I served as the Vice Chair of the 2020 Rising Stars Workshop at the IEEE International Solid-State Circuits Conference (ISSCC) and have co-organized several IEEE SSCS educational and Women-in-Circuits workshops. I recently **co-organized and presented at "ISSCC Circuit Insights", a free educational event broadcasted on YouTube** to **≈1400 undergraduate and new graduate student attendees** across the globe. Previously, I also **co-created a pilot SSCS mentoring program** for Young Professionals and Women-in-Circuits.

I am eager to continue building and maintaining a diverse and supportive environment in the field of electrical engineering and science broadly as demonstrated by my active efforts within Boston University and broader outreach within the IEEE Solid-State Circuits Society (SSCS) [Solid-State Circuits Magazine'17]. Diversity brings complementary perspectives, allowing the creation of non-traditional, unique solutions to real-world problems that make a broader positive impact on society. Collaboration and learning from each other within a diverse community strengthens the institution at large.

References

[Solid-State Circuits Magazine'17] A. Sengupta, "In Step with Rabia Tugce Yazicigil: One of the SSCS's Next Generation of Luminaries [People]," *IEEE Solid-State Circuits Magazine*, Volume: 9, Issue: 3, 2017.