diversity statement | jane l. e

The mentoring aspects of academia and research drew me to this career path; the opportunities I've had to contribute to diversity, impact students, and see their growth as individuals and researchers keep me excited to be here. I always appreciate any opportunities to grow in this space and aim to be a mentor, advisor, and instructor who promotes inclusivity in all of my interactions with students.

Throughout my PhD and postdoc, I've been eager to contribute through service for diversity. Having been in mainly male-dominated departments, my contributions thus far in diversity have primarily been in the space of supporting women in Computer Science—this has ranged from:

- **mentorship**: helping with research mentorship programs to involve undergraduates in research by reviewing applications, mentoring, leading training workshops, and creating training materials for research mentors to better communicate with mentees; as well as through participating in informal mentorship programs through which I've mentored students from middle through graduate school;
- **application committee & assistance**: serving on the PhD application committee, and providing PhD application guidance through volunteering at Grace Hopper and the Stanford Student-Application Support Program;
- **community building**: building community in research by organizing diversity-focused events at conferences in HCI and Graphics, a mini conference for women in CS/EE at Stanford and Berkeley, and generally promoting lab cultures around community and service;
- **increasing availability of creative learning resources**: working on research in designing computational tools to support creative learning to complement the classroom environment;

I have been able to extend my experiences toward supporting broader groups of underrepresented students through my current opportunity as an instructor and hope to have the opportunity to continue to expand my reach as faculty.

MENTORSHIP

During my time as a PhD student and postdoc, I've closely mentored 19 students from high school through PhD (12 non-PhD). Twelve of these students identify as female, eighteen are people of color, and three are from marginalized racial and ethnic groups underrepresented in computer science. Twelve of these students have become co-authors on published papers or have work under review / in preparation for submission. For many of the non-PhD students, I mentored them in their first experiences with research and, in many cases, also their first experiences with HCI.

As a mentor, one of my main goals is to provide positive validation and to elevate my students' voices to help them see their own value and potential. Especially for underrepresented students, society creates constant sources of self-doubt. Thus, being explicitly encouraged to recognize the value in your ideas is crucial. This is especially true in areas like research with a lot of ambiguity and uncertainty to navigate. Through mentoring them on research, I aim not only to help them gain specific practical skills, but also to focus on developing them as confident independent thinkers through intentionally considering details in how I interact with them—asking them for opinions on the project direction and next steps, having them present our shared progress in meetings with professors, working with them side-by-side to reduce barriers to asking questions, and being open with them about my own challenges and uncertainty. It has been incredible to watch them grow in this way and take on more leadership and initiative in the project.

I also strive to create a safe space for students and to be approachable as someone in the community for students to come to for help. In addition to my direct mentees, I make myself available to all interns across the lab, and have kept in touch with several students from classes I've taught. I've had 1:1 meetings with many, given project feedback, provided feedback on applications, celebrated birthdays and deadlines, and more. While some of these activities aren't directly related to research, they help make students feel a sense of welcoming and belonging. I do believe I've been able to successfully create this safe space in multiple labs I've been a part of. Numerous PhD students come to me for advice on projects I'm not involved in, to workshop thesis statements, for advice on communicating with mentors/mentees, etc. I've also had several interns approach me with sensitive personal concerns including financial. During my PhD, I was able to support an intern in the lab to continue their education during a financially difficult time for their family, by covering their tuition for the quarter through my grant money while they continued to work with us as a research assistant.

APPLICATION COMMITTEE & ASSISTANCE

Serving on the PhD admissions committee for a year allowed me to make broader contributions to diversity through having a voice in how to consider applicants' achievements. I took this opportunity to learn and practice considering different

contexts and barriers students might have encountered when evaluating their application. Based on students' self-reporting in the application, committee members marked candidates who may have experienced significant hardships due to being part of a marginalized group. In addition to the default feedback rounds, I volunteered to take an extra look at each of these students' applications to make sure it wasn't discarded without the appropriate consideration. I look forward to contributing service in this way at my future institutions.

At Grace Hopper, I volunteered at Stanford's booth for 4 years where we provided application advice and fee waivers to encourage students to apply rather than filter themselves out. I interacted with a wide range of students of diverse backgrounds (ethnic, socioeconomic, academic, etc.), many of whom were excited but nervous to apply to Stanford for various reasons. Listening to their individual experiences, I helped frame their stories in ways that allowed them to see what they thought of as weaknesses, instead as unique perspectives and strengths as potential future researchers. I connected many with faculty in related research areas and provided continued assistance to many following the conference by answering additional questions and providing feedback on application materials. One student in particular eventually started a PhD at Stanford and told me that my encouragement gave her the confidence to apply.

COMMUNITY BUILDING

As highlighted above, there are many aspects of mentoring that go beyond training to complete the immediate work. I've therefore worked on creating more opportunities for informal learning and mentorship in academic settings: including helping organize the Stanford-Berkeley Women in CS/EE Research Meetup or the SIGGRAPH Berthouzoz Women in Research Lunch (which has grown from an informal gathering of ~30 to a 100+ event with a panel of leading women in Computer Graphics research, into a new larger WiGRAPH organization), to working with the founder of Learning@Scale to create a new ConferenceBuddies program to allow first-time conference-goers to engage with more senior attendees, to actively seeking ways to support younger students and foster a collaborative environment in the lab.

Along with 3 other members of the Design Lab, I have been helping to initiate DISCO (Design Lab Impact and Student Culture Organization), an initiative to encourage a culture and community around service within the lab, through which we are launching a mentorship program in the winter. We have also created a space where students can propose their own ideas for outreach, building community, etc. Through these proposals, we have started working on initiatives for teaching design thinking to younger students, providing service-based conference travel grants, and creating a lunch event centered around food security. I am also working towards launching an application support program for underrepresented students (similar to the one I participated in at Stanford) in the near future. The Design Lab spans quite a wide range of departments, with many professors being jointly appointed across multiple. Therefore, an additional challenge we find that students encounter is picking the appropriate department to apply to—we hope to extend the application assistance to also help address this and help them navigate the many departments represented within The Design Lab.

INCREASING AVAILABILITY OF CREATIVE LEARNING RESOURCES

My research also aims to promote inclusivity by reducing barriers to creative learning, and I hope to extend this vision to broader research domains in the future. In my PhD and postdoc, I leveraged the abilities of intelligent computational tools to make creativity learning more broadly accessible. Rather than replace classes and instructors, my work has aimed at addressing lower level artistic principles, to complement traditional pedagogy, allowing teachers to focus on higher level themes with students. However, for those who want to pursue a creative craft and might not have access to formal classes, my work affords access to guidance directly in the context of the their own work.

With collaborators at Microsoft Research, I additionally contributed to understanding the challenges those with visual and motor impairments faced when engaging with images on social media and provided guidance on reducing those barriers. In the future, I hope to broaden this work on creative learning toward reducing academic barriers across domains. This vision combines my interests in computational visualizations for creative learning with my interest in making research, and learning generally, more approachable to students of varying backgrounds.