

YASMINE KOTTURI

DIVERSITY STATEMENT

As an advocate for equity and inclusion, I am committed to fostering diversity through a lab culture that embraces intersectionality, a classroom that nurtures a profound sense of belonging, and a research and service agenda that actively engages with external communities to promote diverse ways of thinking in engineering and design.

Nurturing a sense of belonging

At Carnegie Mellon University, I honed my efforts to improve academic inclusivity as a founding member of HCII-Improve and as a member of the Respect and Relationship Committee for the Presidential Task Force on Campus Climate (where I was invited to participate by Jodi Forlizzi, the HCII Department Chair and the Dean CMU's School of Computer Science Diversity, Equity and Inclusion division). While at different scales--departmental and university-wide, respectively--both groups aimed to first document the current cultural climate at CMU across students, staff, and faculty, and then determine steps to make CMU a more welcoming environment. Throughout this work, I repeatedly witnessed how powerful shared, safe spaces are when fostering a sense of belonging among underrepresented groups. To put this into practice, as an officer of CMQ+ (CMU's queer graduate student group), I co-founded The Breakfast Club which hosts brunch at various restaurants around Pittsburgh for underrepresented minorities within the LGBTQIA+ community. Over coffee and toast, we raised issues from gender-affirming bathrooms to mental health resources for queer students. In this informal setting, we shared personal stories and received communal support, and in doing so, created signals of needs among graduate students (such as the need for more awareness of the mental health resources at CMU for queer students). Since the founding eight members, the Breakfast Club has grown to 49 members today. One key takeaway from this experience was the importance of informal relationship building and mutual aid among underrepresented groups. As faculty, I will encourage students from underrepresented backgrounds to find groups with shared identity to foster a sense of belonging throughout their PhD, or to create them if they do not exist. In addition, I will prioritize students' awareness of the mental health resources available to them.

Intersectional inclusion

My inclusion efforts at CMU are a reflection of my long-standing dedication to equity in academia, which more formally started when I was a student in the Computer Science and Engineering Department at UC San Diego. As the Vice President of Graduate Women in Computing (GradWIC) at UC San Diego, I actively prioritized intersectionality in our inclusion efforts. Responding to the unmet needs of UC San Diego's diverse student community, I helped to establish and grow the group to 30 members. As VP, I organized departmental events such as a panel on implicit bias with three industry and academic experts. The discussion centered around intersectionality: how gender and race (and other social constructs) intersect to create compounding effects for those who identify with multiple minorities. This was the first department-wide discussion of such topics and 40+ people attended. I also focused on facilitating relationship building between underrepresented graduate students and faculty through brown bag lunches with guided discussions on related literature (e.g., imposter syndrome and stereotype threat). For these efforts, I was presented with UC San Diego's Computer Science and Engineering's Contributions to Diversity award. Today, GradWIC has 11 board members, 400 members on Facebook, runs a formal mentorship program, hosts events regularly (such as resilience workshops, plant potting, graduate school application workshops, high school field trips, movie nights), and recently received the \$25,000 Xilinx Women in Technology Grant. Crucial lessons I took from this work were the significance of initiating action, setting clear and well-informed objectives, and addressing the need for institutional memory.

Positive lab environment

In my current lab, I have taken active steps to create a positive working environment (Hammer *et al.*, 2020), while mentoring my students (the majority of whom are women in computer science, some are first generation). First, I am leading efforts to create a set of community guidelines with the lab through open and iterative discussions. Currently, our community guidelines include: start lab meetings with giving kudos to someone who

has helped you recently to celebrate collaboration and support, ensure feedback is humbly given and received through sharing a positive comment alongside constructive comments, and prioritize work-life balance and make time to spend together outside of meetings. Articulating community agreements is a practice I will use as a faculty and revisit annually to ensure the document reflects all members of my group and contemporary thinking. In addition, drawing on my experience working with a feminist hackerspace (Kotturi *et al.*, 2021, Kotturi *et al.*, 2024), I host a weekly hackathon in our lab which supports diverse forms of hacking not limited to software development but also writing and deliberation as a form of hacking (Fox *et al.*, 2015). The hackathon is open-invite, and has led to new collaborations among PhD students through relationship building. As faculty, I will continue to host a weekly hackathon as a way to bring together students across groups to support cross-pollination within the department. In addition, I will continue to organize informal lab outings such that students are able to better get to know their peers. My certifications such as Green Dot and SafeZone provide me with the formal training to proactively create physically and psychologically safe environments for students, both of which I am firmly committed to. As faculty, I will continue to complete such trainings to stay up-to-date on care practices which contribute to the well-being of the students. Taken together, a positive lab culture must be proactively, collaboratively, and iteratively created to be successful. As faculty, I look forward to creating an environment where my students feel supported and can excel.

Community commitment beyond campus

My commitment to equity and inclusion extends beyond the university campus to communities often left out of traditional processes of knowledge production. Throughout my PhD and postdoc, I have worked closely with two local nonprofits in Pittsburgh which are dedicated to equity in technology and entrepreneurship and support underrepresented minorities from low-income communities. In this work, I provide various forms of technology support from weekly tech office hours---a service called Tech Help Desk which I have been running every week for over four years (Kotturi *et al.*, 2022, forgecommunity.org/services/tech-help-desk)--to co-designing and building a novel system for peer support (Kotturi *et al.*, 2024, peerdea.app). Both of these projects are now embedded in ongoing programming at the nonprofits (Kotturi *et al.*, 2024). In addition, I ensure my engagements are aligned with my community collaborators' career aspirations. For instance, one collaborator decided to apply to a Ph.D. program after becoming more familiar with the academic research process. She now holds a Ph.D. in education from University of Pittsburgh. Another community collaborator's goal was to improve his public speaking abilities, and we therefore co-presented our paper at CHI 2022 in New Orleans (Kotturi *et al.*, 2022).

Critical to the success of these long-term, academic-community partnerships is not only proving commitment to community stakeholders (Le Dantec and Fox, 2015), and deeply understanding local histories (Harrington *et al.*, 2019), but also navigating the tensions of doing such work while based in an academic setting: providing compensation for community collaborators who are often more involved than participants, fostering community ownership of data and research outcomes, and more conceptually, navigating universalist pressures in computing to derive technological solutions which work for everyone. To systematize these tensions and how to address them in the context of work and entrepreneurship, I conducted a comparative analysis of two long-term tech capacity building programs in Pittsburgh and Detroit (Kotturi *et al.*, 2024). I found that to sustain community engagements, it was essential to focus on three aspects: relational sustainability (e.g., manage expectations and nurture relationships), technological sustainability (e.g., prioritize technological repair and maintenance), and financial sustainability (e.g., frame academic resources as kickstarting community initiatives). As faculty, I will continue to explore institutional and systemic barriers to equitable research practices in computing and investigate the infrastructural capacity building required to address these barriers.

Taken together, as faculty I hope to empower students and community collaborators such that they achieve their career goals. By prioritizing intersectionality, creating a sense of belonging and positive lab environment, committing to communities beyond campus, and sharing my experiences in academia as a white, queer, immigrant woman, together, I believe computing can become a more equitable and inclusive field.

REFERENCES

- Fox, S., Rachel Rose Ulgado, and Daniela Rosner. "Hacking culture, not devices: Access and recognition in feminist hackerspaces." In *Proceedings of the 18th ACM conference on Computer supported cooperative work & social computing*, pp. 56-68. 2015.
- Hammer, J., Alexandra To, and Erica Principe Cruz. "Lab counterculture." In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pp. 1-14. 2020.
- Harrington, C., Sheena Erete, and Anne Marie Piper. "Deconstructing community-based collaborative design: Towards more equitable participatory design engagements." *Proceedings of the ACM on Human-Computer Interaction* 3, no. CSCW (2019): 1-25.
- Kotturi, Y., Blaising, A., Fox, S., Kulkarni, C. The Unique Challenges for Creative Small Businesses Seeking Feedback on Social Media. ACM Conference on Computer Supported Cooperative Work. 2021.
- Kotturi, Y., Herman T. Johnson, Michael Skirpan, Sarah E. Fox, Jeffrey P. Bigham, and Amy Pavel. "Tech Help Desk: Support for Local Entrepreneurs Addressing the Long Tail of Computing Challenges." In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. 2022.
- Kotturi, Y., Hui, J., Johnson, T., Sanifu, L., Dillahunt, T. Sustaining Community-Based Research in Computing: Lessons from Two Tech Capacity Building Initiatives for Local Businesses. ACM Conference on Computer Supported Cooperative Work. 2024.
- Kotturi, Y., Jenny Yu, Pranav Khadpe, Erin Gatz, Harvey Zheng, Sarah Fox, and Chinmay Kulkarni. "Peerdea: Co-Designing a Peer Support System with Creative Entrepreneurs." ACM Conference on Computer Supported Cooperative Work. 2024.
- Le Dantec, C. A., and Sarah Fox. "Strangers at the gate: Gaining access, building rapport, and co-constructing community-based research." In *Proceedings of the 18th ACM conference on computer supported cooperative work & social computing*, pp. 1348-1358. 2015.