Caroline Lemieux – Diversity Statement

The work I am most proud of has been born out of collaboration. Innumerable times, key concepts have come directly from collaboration, from the diversity of thought collaboration brings. My collaborators and I have different life experiences and world-views, and thus, different ways of tackling the problem at hand. Different insights from our different experiences have filled different gaps in our proofs, resulted in the key insights of our projects, and improved the clarity of our papers.

We cannot effectively move forward as a field if we do not, as a community, actively recruit and retain students from a diversity of backgrounds. The current face of our community is much more homogenous than the world at large, and it can be difficult to be the person in the room who looks, speaks, or acts differently from everybody else.

I know this from personal experience. I have never felt so discouraged than in the moments where I felt that perceptions of my gender dominated perceptions of the value of my work. Luckily, thanks to my support network, such moments have been few and far between for me. Nonetheless, these experiences worry me because of what they signify for others. While I am a woman, I am white, upper-middle-class, a native English speaker, and a third-generation academic. How do students who lack some of these advantages feel?

All this to say: there is no point in bringing students from more diverse backgrounds into our field if we cannot support them, make them feel welcome, and give them the tools to succeed. Below are some of the ways in which I contribute to diversifying our field in my day-to-day actions.

In-Group Support

I was very lucky to have many excellent women as mentors throughout my undergraduate career, including several women professors who left me feeling like I could indeed have a career in computer science and mathematics. The desire to spread this feeling of belonging cemented my desire to continue on in academia, so I could one day be at the front of the classroom as well. For students to whom I am not an agent of in-group support, I will help them find a support network they feel comfortable going to for their in-group questions and concerns.

Another important source of in-group support for me was having a group of people with whom to share my daily experiences, and for this reason, **I took on leadership roles in Berkeley's WICSE** (Women in Computer Science and Engineering) organization. I found a lot of support in my early years in weekly WICSE group lunches. As a senior grad student, I moved on to a leadership position in this organization, both as social chair and treasurer, during which time I helped organize many events that helped form lasting bonds amongst women in the department. This included helping to organize the yearly Stanford-Berkeley research meetup in 2019, which brought together graduate students from both departments to discuss research and career-building skills.

Having held a leadership position in WICSE, I know firsthand how difficult it is to maintain continuity in a student-led organization. We were lucky to have staff members who helped WICSE both in the day-to-day, attending weekly lunches and supporting end-of-term celebrations, as well as helping with the organization of larger events. Moving forward, I will support staff to aid the continued maintenance of an organization like WICSE, and take some time to attend lunch-type events myself. I will also support similar organizations for, for instance, URM and LGBTQ+ students, to the capacity in which these organizations desire my support.

Active Inclusion

One does not need to be part of the in-group to help women or minority students succeed. The reason I got into teaching and research in computer science in the first place is because professors made

a point of reaching out to me and suggesting that I apply to a TAship, try out a research project, and apply for summer research funding.

Moving forward, while I will actively reach out to excellent students of all backgrounds, I want to make sure to give opportunities to students who do not fit in the traditional CS "mold". An institutional way to help other professors and mentors do this as well is to set up a program like **UC Berkeley's DARE**, which encourages women and URM to apply for research opportunities. Just giving a nudge to students who never thought of themselves as being able to do computer science research is helpful in diversifying our research body.

When I entered graduate school, there were moments where I felt seriously out-of-place: senior students seemed to know so much more than me, since they said words and phrases I didn't understand. Because of that experience, I want to avoid new students having these feelings as much as possible. So, to support new students from all backgrounds, I have built up **a set of day-to-day supportive behaviors** to integrate them into my broader research groups. Amongst other things,

- I actively solicit junior students' opinions when they do not do so themselves.
- When a junior student's contributions are overlooked in a meeting, I bring them back to the forefront.
- When someone goes through a concept too quickly, I ask clarification questions myself, in the hope that this can break down the concept in case more junior students are afraid of speaking up.
- I make sure to react in an encouraging manner towards new students in meetings, especially in the era of Zoom meetings.
- Additionally, in the COVID-era, I spearheaded an effort to have an ongoing weekly social hour with new graduate students, in order to make up for the casual interactions that are lost when we are all working from home.

I will continue to very intentionally model these behaviors in my own research group.

Mentorship Beyond Research

Beyond academic advising, an incredibly important element to staying the course in a field where you are not naturally welcome is to have mentors with whom you can discuss the intersection of your personal life and your career. It is also important to have a realistic idea of what is important to spend time on, to prevent burnout and disillusionment.

I am lucky to have found such mentors both in professors and amongst my fellow graduate students. My parents are both academics, and they have guided me in the high-level about what is most important in my career—getting good reference letters, doing good work, but knowing that I need to advertise that good work as well. Knowing these things from the start definitely gave me a leg up in academia. As we look to reduce the diversity gap in the upper echelons of our field, a big step is to **proactively give students the extra advice** that those of us who grew up in academia know.

To students I directly advise or teach, I will provide this sort of advice in our regular meetings or office hours. For the broader community, I will participate in events targeted towards first- and second-year undergraduates. If such events do not exist, I will support their organization. The undergraduate CS women's organization at Berkeley organized such "get into research" events jointly with WICSE, but the events tended to attract more senior undergraduates. Planting a seed earlier than this is immensely important, to give students time to think about their career and build up their skills at a reasonable pace. Events integrating advice and realistic portrayals of research from both graduate students *and* professors will help us recruit students and help them through the inevitable challenges of a research career.