DIVERSITY STATEMENT

GEOFFREY CHALLEN

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I am involved in several efforts to improve gender and other aspects of diversity within CS. UB's undergraduate CS programs are only around 10% female, which lags behind the national average, which is itself far too low. As a creative way of encouraging diversity, I organized the creation of a Diversity in Computer Science Mural. Students submitted images celebrating diversity, and the winner was an iconic 1960s photo showing Grace Hopper leading a diverse team working on COBOL. I led the fundraising effort, and support from colleagues provided a prize for the winning submitter and paid for the mural's installation.

Figure 1.1: **Installation of the Diversity Mural**

I also initiated the establishment of a local chapter of the Scientista Foundation. Scientista is a national organization dedicated to improving female STEM representation. Our chapter was launched in 2014 and since then has organized many events to raise awareness about women in CS, including meet ups, panels, and monthly brunches. With the help of a donation from Bloomberg, the group expanded its activities next year—including sending a delegation to the 2015 Grace Hopper Celebration of Women in Computing (GHC). Although this issue will take more time and energy to address, there are some promising signs of change at UB. For example, recently our UB ACM Student Chapter—which I advise as a faculty mentor—elected both a female president and vice-president.

An important part of my motivation in helping design new introductory courses at UB was to directly address poor diversity in our department. The two-course introductory programming sequence that I designed has specific features designed to attract and retain women and other underrepresented minorities. The course content emphasizes ways that computer science has impact and how to build powerful solutions quickly and deemphasizes deep understanding of specific computer science tools. The course assignments also emphasize impact and solving problems drawn from areas outside of computer science. Topics for the course assignments were chosen to appeal to a variety of different types of students that might be interesting in computer science: including designers, entrepreneurs, students that want to change the world and solve social problems, scientists, mathematicians, and hackers. My goal is to ensure that students see and experience the power of computing to solve problems, change the world, and change lives.

I also took steps to try and improve diversity when designing and deploying our new course on the internet. Course activities and videos included a mix of technical and non-technical concepts and content. When reassigning students into groups each week, we took care to ensure that women were always in a group of four with at least one other women, and had a 50% chance of being in a pair with another female. When recruiting the initial course staff, we also took care to hire as many qualified women as possible.

Over the past few years, 12 women have contributed to my research group: Rizwana Begum, Drexel Ph.D student; Aishani Bhalla, Gela Malek Pour, and Lakshmi Ethiraj, UB undergraduates; Vinu Charanya, Rajeshwari Adapalam, Anuja Raval, Bhaavya Kapoor, Denise Blady, and Ramya Rao, UB Masters students; Sonali Batra and Anudipa Maiti, UB Ph.D. students. I have also worked with undergraduates from underrepresented groups as part of UB's Louis Stokes Alliance for Minority Participation (LSAMP) program.