Student Proposal: Diversity and Inclusion in the Computer Science Department

Katie Bramlett¹ Oliver Broadrick Alyssa Ilaria Sam Kusner² Catherine Meadows Sreya Nalla³ Marshall Thompson Steven Yoon⁴

¹Co-Chair, Women in Computer Science ²Vice President, GW Chapter, Association for Computing Machinery

³Senior Class Representative, Women in Computer Science ³President, GW Chapter, Association for Computing Machinery {kbramlett,obroadrick,ailaria,meadowsc,sreyanalla,mdt_}@gwmail.gwu.edu 28 February 2021

1 Introduction

To foster a diverse and inclusive community, the Computer Science Department (CSD), needs to develop and enforce a plan that is reflective of student beliefs and values. Written by students, this proposal provides specific recommendations, goals, and initiatives to the CSD to constructively improve inclusivity for all. When addressing such matters, we recognize and support the importance of placing value on voices by including the thoughts and ideas of all students, from all backgrounds. Therefore, we distributed a survey to gather thoughts and suggestions from students, as well as quantitative information. So far, we have received responses from 63 students, approximately 25% of undergraduates.

Outline The remainder of this document is organized as follows. Section 2 describes the survey and its quantitative results. Proposed actions are presented in Section 3. Finally, Section 4 gives a brief conclusion.

2 Survey

To create an accepting, inclusive working and learning environment, we must first foster a space for meaningful participation from people of all backgrounds. Conducting an (optionally) anonymous survey allowed us to articulate a proposal, founded upon diverse ideas and perspectives, that outlines a diversity-oriented strategy for promoting an inclusive culture within the CSD.

The survey was distributed using multiple platforms. Flyers with QR Codes were posted throughout the fourth floor of the Science and Engineering Hall. Posts were made in online forums of at least one course for each undergraduate class (freshman, sophomore, junior, and senior). Several Undergraduate Teaching Assistants made announcements to their students about the survey, projecting the QR Code and giving time for students to fill it out. Lastly, the Association for Computing Machinery (ACM) and Women in Computer Science (WiCS) chapters distributed the survey to their members via email.

2.1 Questions

The survey contained the following 10 questions:

- 1. Please rate the inclusivity of this department based on your experience.
- 2. Please share any ideas for how we can make our department more inclusive.
- 3. If you can identify a problem with the inclusivity of our department but have no ideas for ways to improve it, you are still welcome to share your thoughts here if you would like.
- 4. Your name? (only if you want your responses to be publicly associated with your name)
- 5. Pronouns?
- 6. Gender identity?
- 7. Race/ethnic group or groups?
- 8. Disability status?
- 9. Anything else?
- 10. Class? (2022, 2023, 2024, 2025, other?)

2.2 Quantitative Results

The survey yielded some interesting quantitative results that can be used to further our understanding of these issues.

3 Proposed Actions

3.1 Undergraduate Research Outreach

All students should be aware of and feel comfortable in pursuing research opportunities with faculty. In order to increase accessibility of faculty and boost awareness, opportunities should be displayed and distributed in a public manner. This includes but is not limited to a poster displayed outside the CSD

Average Inclusivity Rating by Gender Identity

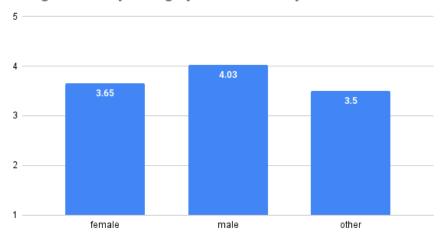


Figure 1: Mean inclusivity rating by gender identity. The number of responses that identified themselves in one of these categories is respectively 23, 29, and 2.

office with research opportunities and faculty contact information, publicized research talks from students and faculty, announcements to classes about research opportunities.

3.2 Mindful Pronoun Usage

Proper use of gender identity terms, including but not limited to pronouns, is an essential measure for fostering an inclusive environment. The CSD should normalize pronoun usage in a top-down approach, leading by example. This includes but is not limited to including pronouns in faculty biographies on the CSD website, in email signatures, in Zoom names, etc. Additionally, when conducting introductions in the classroom, faculty can introduce themselves and provide their pronouns and encourage students to do the same, if comfortable.

3.3 Diversity and Inclusion in our Curriculum

The CSD ethics course, required for all Computer Science undergraduate students, should include a thorough unit and discussion on diversity and inclusion in computing. This includes but is not limited to learning how to recognize and address unconscious bias, why diversity in engineering is crucial, opportunities and resources within the CSD, and how to have conversations about diversity and inclusion efforts.

Average Inclusivity Rating by Race / Ethnic Group

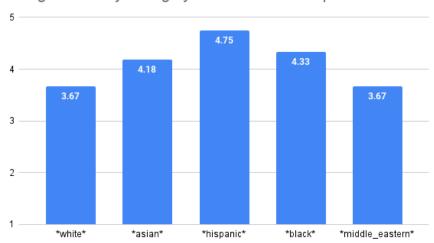


Figure 2: Mean inclusivity rating by self-described race/ethnic group. The number of responses that identified themselves in one of these categories is respectively 24, 17, 4, 3, and 3.

3.4 Classroom Environment

Active inclusivity efforts in the classroom are necessary to both correct existing disparities as well as to establish a tone that prioritizes diversity and inclusion. The efforts listed below should be made explicit by professors at the beginning of each course for increased transparency and understanding. This includes but is not limited to:

• Syllabus Diversity & Inclusion Statement. As with the common religious accommodation, academic integrity, and DSS statements in course syllabi, faculty should be required to include a diversity and inclusion statement. A sample statement is as follows:

"It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups."

From Clemnson sample.

Average Inclusivity Rating By Class

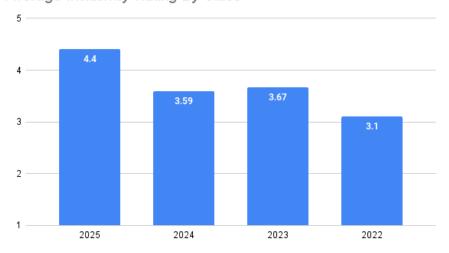


Figure 3: Mean inclusivity rating by undergraduate expected graduation year (by undergraduate class). The number of responses that identified themselves in one of these categories is respectively 20, 22, 6, and 10.

- Group Assignments. [TODO]
- Group Work Evaluations. Peer evaluations for group assignments should be given after all group assignments or, in the case of long-term projects, given periodically throughout the term. These evaluations should include a section that specifically asks about inclusion within the group dynamic (i.e. Are your group members treating you with respect? Do you feel like your thoughts and contributions are valued by your group members?). Professors should review these evaluations in a timely manner and engage with groups who identified issues. Anonymous Reporting. Students should have an accessible platform for (optionally) anonymous feedback for each course. This could manifest as an anonymous form for reporting biased behaviors, giving feedback about inclusion efforts in the classroom, etc. This feedback should be frequently monitored by the instruction team and addressed as soon as possible.
- Office Hours. Office hours, often hosted in casual, common spaces where
 other students may linger, can potentially breed intimidating, exclusive
 environments. In order to enhance the accessibility of instructional team
 help during office hours, the CSD should assist instruction team members
 in reserving classroom spaces. Hosting office hours in a classroom setting
 will improve the ability of instructors to more fairly distribute their time
 to all students in attendance.

- Instruction Team Training. Undergraduate Teaching Assistants (UTAs), Learning Assistants (LAs), Graduate Assistants (GAs), and professors should receive the same diversity and inclusion training (i.e. group training from the GW Office for Diversity, Equity, and Community Engagement) prior to interacting with students as a member of the instructional team.
- DSS Students. Professors should have (student-optional) recurring checkin meetings with DSS students to ensure they have proper resources, to check on their progress, etc.

4 Conclusion