

Departmental BPC Plan Computer Science University of Colorado Boulder



Effective dates of plan: 11/18/2022- 11/18/2024

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1. Context

University of Colorado Boulder is a public, research university located in Boulder, Colorado. The Computer Science department is housed within the College of Engineering and Applied Science (CEAS). Our department offers a variety of degrees for different education levels (BA, BS, MS, PhD). Statistics showing how demographics in our department compare to our college, university, and other US CS departments are shown in Figure 1, with respect to gender and race. These statistics come for the 2020 Taulbee survey and 2021 data from our University’s administrators. With respect to gender, our department is slightly above the national average of females for the graduate students and below average for faculty. With respect to race, our department is below the national average for representation of Black or African Americans across faculty and graduate students and for representation of Hispanics and Latinos across faculty and Masters students. Our plan focuses on increasing representation and inclusivity for people who are American Indian, African American, Latino, and women.

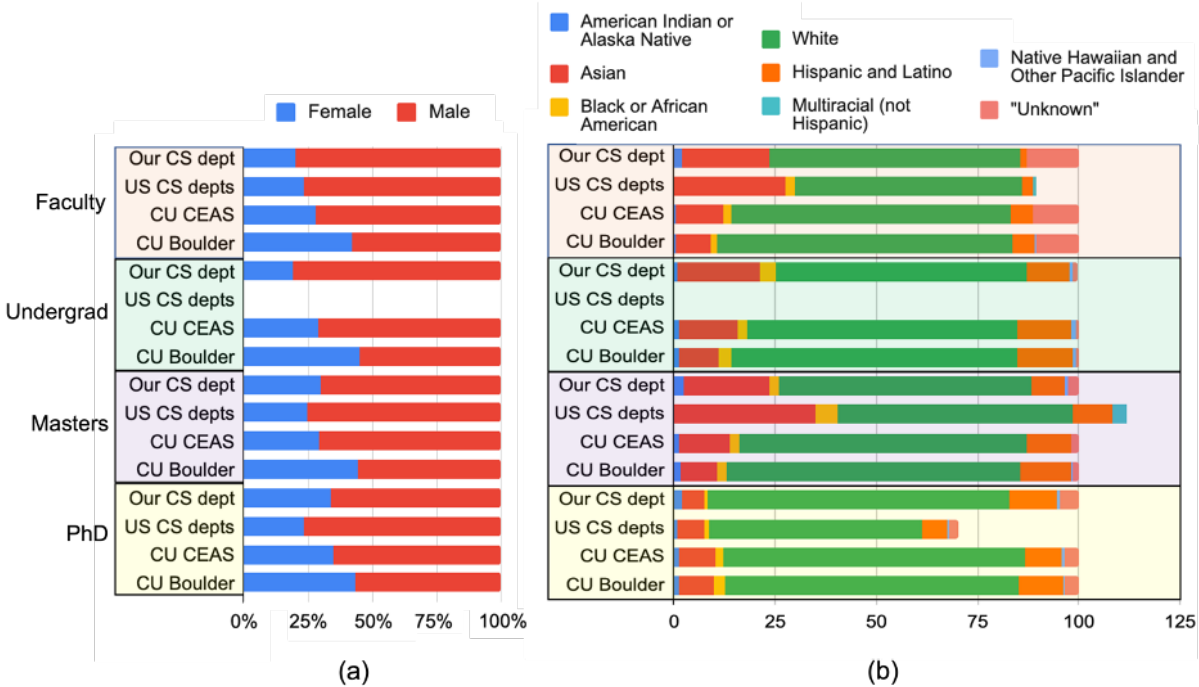


Figure 1. Comparison of demographics in our department with those of all US computer science departments, our college (CEAS), and our university (CU Boulder), with respect to (a) gender and (b) race. (bars missing for sources without the data and exceeding 100% for sources permitting multiple choices)

2. Goals

Our outlined goals focus on increasing diversity and inclusivity amongst our students. We will measure progress *annually*, as defined in our following goal and activity descriptions, and then reassess our plan after *five years* based on our findings (i.e., our goals are time-bound).

G1: Increase number of students at all levels pursuing and being recognized for their leadership roles in BPC activities each year
G2: Increase representation of students from systemically marginalized groups at all levels in research each year
G3: Increase number of inclusive messaging and recruiting efforts of systemically marginalized groups to our undergraduate and graduate programs each year
G4: By 2026, increase the percentage of courses providing inclusive pedagogy (i.e., teaching practices) by at least 20%.

3. Activities and Measurement (contact in charge in bold)

A1a [Goal 1]: Create and run bi-annual program to decide which student-led projects/activities about BPC to sponsor every semester, **Gurari**

M1a: Number of submissions and number of sponsored projects every year.

A1b [Goal 1]: Establish annual awards for students demonstrating BPC leadership, **Gurari**

M1b: Number of students nominated for such awards every year.

A2a [Goal 2]: Host research experiences for students recruited from programs that target systemically marginalized communities (e.g., Bold Center, STEM Routes, UROP, Summer REUs), **Peleg**

M2a: Number of self-identifying students from systemically marginalized groups participating in research in CS faculty research groups, number of self-identifying students electing to do undergraduate thesis, and department retention rates, stratified by demographic, geographic, and other statistically tracked groups.

A2b [Goals 2 and 3]: Develop a course and/or independent studies for our undergraduate graduate students to learn how to teach/mentor K-12 students from systemically marginalized groups (e.g., mentors at science fairs, instructors in school programs)

Schreuder

M2b: Number of participants from instructors and students as well as students' outcomes (e.g., success in science fairs, college admissions for alums of mentoring programs).

A3a [Goal 3]: Increase number of visits to minority-serving institutions, conferences, and events to advertise our programs for prospective graduate students, **Brown**

M3a: Number of visits across all members of our department (faculty, staff, students).

A3b [Goal 3]: Increase inclusive external messaging (e.g., website, social media), **Lehl**

M3b: Number of screen reader tested and approved webpages in the department and faculty, external messages with mentions to BPC-specific items, and engagement (e.g., page views, social media likes and reshares, views of videos).

A4a [Goal 4]: Redesign course syllabi with input from the pedagogy committee to incorporate inclusive messaging and content, **Waggoner**

M4a: Number of courses with syllabi approved by the pedagogy committee and comparison of average department scores before and after the course was taught of the question on the following course evaluations: "Q8 Consider diverse perspectives (gender, political, ethnic, racial, etc.) during class or in assignments."

A4b [Goal 4]: Increase course accessibility to a broader audience by adding asynchronous teaching options for synchronous classes (i.e., uploading lecture videos online), **Waggoner**

M4b: Number of courses offering hybrid options and number of *core* courses vs *optional* courses that are available asynchronously.