**Departmental BPC Plan
College of Information and Computer Sciences (CICS)
UMass Amherst**

Effective dates of Plan: Fall 2019- Spring 2023

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1. Context

The University of Massachusetts Amherst (UMass Amherst, UMass) is a public research (R1) and land-grant university in Amherst, Massachusetts. It is the flagship campus of the University of Massachusetts system. The state population is over 70% white, 12% Hispanic/Latinx, 9% African American, 7% Asian, and every other racial group comprises less than 2% of the population. The overall undergraduate population is 24,209 students with 50% women, 21% first-generation college, 15% underrepresented groups (Black or African American, Latinx, American Indian or Pacific Islander) while the College of Computer and Information Sciences (CICS) has an undergraduate enrollment that is 17% women, 17% first-generation college, and 7% from underrepresented groups which include both African American and Latinx students. All statistics represent the Fall 2019 baseline. Retention analysis based on the Class of 2019 shows that retention of students from underrepresented groups is the lowest when compared to all other student groups. By the second year, only 85% are retained, and retention continues to decline in the third year to 69% and then 62% by year four. Underrepresented students' 4-year graduation rate is only 46% in CICS compared to 79% for White students. The university average 4-year graduation rate for underrepresented students is 68%. Retention of women by the fourth year is 85% across the university and slightly higher at 95% in CICS. 4-year graduation rates for women are 93% in CICS compared to 82% university wide.

2. Goals

G1: Expand opportunities for undergraduate mentoring and leadership to increase recruiting and retention of groups underrepresented in CICS to be in on par with the university averages. By Fall 2021, we will have 5 faculty and 20 students involved in an Undergraduate Mentoring Program and will have sponsored 20 student attendees at Grace Hopper and/or Tapia.

G2: Promote an inclusive climate focusing on community-building activities, critically important for retention and recruitment of underrepresented students and women. By Fall 2020, faculty will have given 5 workshops for Hackher413 participants and 20% of permanent faculty will have completed a diversity-themed book group.

G3: Increase student, faculty and staff recognition of diversity and inclusion issues as they relate to computing by integrating lessons on equity and inclusion principles into education spaces, thereby enhancing the effectiveness of existing retention efforts.

3. Activities and Measurement

A1: CARE: In summer 2020, under the leadership of our dean, Laura Haas, our college formed a Committee Against Racism and for Equity (CARE). The CARE Core committee oversees the efforts of 8 different working groups comprised of mixed teams of students, faculty and staff. These groups are

engaged in a range of activities including mentoring, compiling inclusive teaching practices, climate (including training related to micro-aggressions), recruiting, training in inclusive pedagogy, and attention to application and admissions processes. [Ongoing, Goals 1, 2, 3; Leaders: Laura Haas, Erika Dawson-Head, Michelle Trim and Nader Akoury]

A2: Diversity and inclusion in computing related book groups: CICS office of diversity and inclusive community development has since 2019 led multiple book groups open to faculty, staff and students with the goal of modeling and engaging the CICS community in conversations around race and privilege. [Ongoing, Goals: 2, 3; Leader: Erika Dawson-Head]

A3: FreshCICS: To improve retention of students to the second year, undergraduate advisors will recommend to all students that they should participate in one of the following activities by the end of their first year: (1) attend a social event focused on first-year students; (2) attend a college research talk; (3) other engagement, such as competitions, working in other departments and local events. Faculty will actively seek out students from underrepresented groups to participate in these activities. [New, Goals 2; Leader: Neena Thota and Alicia Clemente]

A4: Undergraduate Mentoring Program: Faculty will sponsor incoming first year women students through the undergraduate mentoring program, where upper-level women mentor new, incoming women students in the CS and the Informatics Majors. [New, Goals 1, 2; Leader: Emma Anderson]

A5: Grace Hopper and Tapia: Faculty will sponsor students from underrepresented groups to attend these conferences. [New, Goal 1, Leader: Erika Dawson-Head]

A6: B(U)ILT (Black, Indigenous, and Latinx in Tech): Faculty will provide funding for the student-run organization started in 2019 that fights for racial equity in academia and technology. The group advocates for the needs of students in tech, provides support for marginalized students and works to build a supportive community through career events, community discussions, and talks with industry professionals. [New, Goals 1, 2; Leader: Nader Akoury and Nick Perello]

A7: Hackher413: Faculty will give workshops, mentor teams, and judge projects for the student-led organization that is an all women (cis, trans and non-gender conforming) hackathon. The group provides mentorship, tech workshops, diversity and inclusion focused workshops, and opportunities for 300+ marginalized people in tech to come together and recognize their abilities. [New, Goal 1,2; Leader: Erika Dawson-Head]

We plan to update this plan every fall, evaluating effectiveness of the activities, and updating contacts. We will also track the following metrics using the Fall 2019 numbers in the Context section as a baseline.
1. Percentage of faculty participating in this BPC Plan.
2. Percentage of faculty and students from underrepresented groups participating in mentoring and community-building activities, measured through attendance rolls and exit survey questions to our students.
3. Changes in demographic student data, relative to university and local population.
4. Changes on the 2, 3, and 4-year retention rates for students from underrepresented groups.