Departmental BPC Plan University of Arizona, Department of Computer Science

Effective dates of Plan: 12/17/2021- 12/17/2023

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1. Context

University of Arizona (UA) is one of three major public universities in the state of Arizona. UA is one of only a few R1 research universities to be a Hispanic Serving Institution, and the first of the three AZ state universities to have that distinction. The Department of Computer Science (UACS) serves approximately 1300 undergrads and 100 graduate students. UACS values inclusivity for all, regardless of race, ethnicity, age, gender, religion, sexual orientation, gender identity, gender expression, disability, economic status, and background.

The following table shows, as of Fall 2021, the underrepresentation of our primary focus populations for undergraduates (women, Hispanic/Latinx, African American, and Native American) relative to both the university and state populations. Faculty also engage in smaller scale efforts for these underrepresented groups at both the graduate and undergraduate levels.

	AZ population	UA ugrad (61.1% AZ residents)	UACS ugrads
Native American	5.2%	3.2%	0.7%
Black/African American	5.3%	6.5%	2.9%
Hispanic/Latinx	31.7%	28.3%	21.0%
Women	50.3%	55.0%	20.6%

2. Goals

The BPC mission of UACS is to substantially increase the percentages of our primary focus populations to better reflect the demographics of the university and state population.

- G1: To help identify issues and monitor progress, our goal is to implement mechanisms to collect, track, report, and regularly discuss quantitative and qualitative data on BPC each academic year.
- G2: To promote a more inclusive environment, our goal is to expand the number of, and participation in, community-building activities for our primary focus populations by at least 5% each year.
- G3: To improve recruitment and retention of our primary focus populations among UA students, our goal is to increase the number of out-of-classroom mentoring opportunities for students and the number of faculty participating in them by at least 5% each year.
- G4: To improve our recruitment pipeline, and to better reflect state demographics and mitigate potential barriers to entry, our goal is to increase by 5% each year the number of students and faculty who participate in CS-specific, K-12 outreach programs at local high schools as well as regional campuses that our undergraduates transfer to UA from.

3. Activities and Measurement

A1: [Data Collection (G1)] A responsibility of our DEI committee is to annually collect and review demographic data for our student enrollment and retention, and particularly focus on evaluating retention within our introductory course sequence as well as the relationship between our pre-major and student retention through a CIC Diagnostics Grant. Faculty engage with the data by helping to collect and annually disseminate it to the UACS community. We will evaluate the effectiveness of this through the quantity and regularity of data we collect (in context with all other activities). (Contact: Josh Levine)

A2: [UACS Student Clubs (G2)] UACS will support existing clubs that focus on our primary focus populations, such as our Women in Computer Science (WICS) club. Modeled after WICS, we are also working to create new clubs to encourage participation among Hispanic/Latinx, Black/African Americans, and Native American students. Faculty mentors of any club also work to inform and engage students regarding department BPC efforts. Outcomes are measured by the number of students and faculty who participate. (Contact: Katherine Isaacs)

A3: [UA Girls who Code (G2)] UACS supports the University chapter of Girls Who Code, and faculty can both participate in building this community and help facilitate events. Outcomes are measured by the number of students and faculty who participate. (Contact: Jason Pacheco)

A4: [Engagement Events (G2, G3)] Faculty and staff organize to help encourage students to participate in local competitions, department events, and national events like Grace Hopper and Tapia. To bolster these efforts, we will create forums such as undergraduate research celebrations to complement our existing CS-specific career fair and further facilitate student engagement, measuring outcomes by participation. (Contact: Alex Hernandez)

A5: [Undergraduate Research Mentoring (G3)] To build students' confidence and help them see themselves advancing in the field, students are recruited (particularly from our primary focus populations) to participate in UGRAs through REUs and other similar programs. Outcomes are measured by tracking student participation as well as reporting career outcomes. (Contact: Chicheng Zhang)

A6: [Undergraduate TAs (G3)] Our thriving TA program also offers opportunities for out-of-classroom mentoring, both from faculty and from peers. Outcomes are measured by tracking student participation (particularly from our primary focus populations). (Contact: Melanie Lotz)

A7: [CS Ambassadors (G4)] Our CS Ambassadors program is a focal point for department K-12 outreach. Student ambassadors are recruited from our primary focus populations, and both students and faculty participate in (often student-led) events. Outcomes are measured by the number of students who participate, number of events held, and number of K-12 students engaged. (Contact: Martin Marquez)

A8: [Faculty-Organized K-12 Outreach (G4)] Complementary to the framework of CS Ambassadors, UACS faculty will use best practices for outreach to our primary focus populations in organizing individual outreach events (such as talks at local high schools) that both leverage and grow our recruiting network. Outcomes are measured by logging the number of students and faculty per year participating in such events and surveying their experiences. (Contact: Stephen Kobourov)