

**Departmental BPC Plan
School of Computer Science
Carnegie Mellon University**



Effective dates of Plan: January, 2021 – December, 2023

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1. Context

Carnegie Mellon University, located in Pittsburgh, PA, is a private research university with approximately 14,800 students and 1,500 faculty. The School of Computer Science (SCS) at Carnegie Mellon University is top-ranked for research and teaching (currently ranked 2nd by the US News & World Report). The undergraduate program offers an accredited bachelor of science (B.S.) degree in computer science. Our baseline reported data is as follows (note that any individual can opt not to report)

Fall 2019 CMU student demographics

14,799 Total / 6,410 Women (43%) / 1,162 BIPOC¹ (7%)
6,929 Undergraduate / 3,280 Women (50%) / 843 BIPOC (12%)
5,648 Master's / 2,226 Women (39%) / 218 BIPOC (3%)
2,063 PhD / 628 Women (30%) / 49 BIPOC (4%)

Fall 2019 SCS student demographics

2,460 Total / 847 Women (34%) / 84 BIPOC (4%)
854 Undergraduate / 403 Women (47%) / 93 BIPOC (10%)
967 Master's / 281 Women (29%) / 5 BIPOC (.05%)
639 PhD / 163 Women (25%) / 20 BIPOC (3%)

Fall 2019 CMU and SCS tenure track faculty demographics

1,483 Total CMU (31% women, 4% BIPOC)
283 Total SCS (21% women, 1.7% BIPOC)

2. Goals

Carnegie Mellon's School of Computer Science aims to create an inclusive environment for all of our students and faculty. We seek to substantially increase the percentage of women and people from groups underrepresented in computing in the next ten years with the following concrete steps:

- Year 1 Goal. Perform data collection and benchmarking to understand where the gaps in student and faculty recruitment and retention might be.
- Year 2 Goal. Develop and promote activities to increase diverse student recruitment.
- Year 3 Goal. Create a strategic recruiting and retention plan for faculty.

¹ We define BIPOC as Black, Indigenous, and People of Color, to include African American, individuals of African or Caribbean descent, Native Americans, and individuals from Mexico, Pacific Islands, and the Philippines.

3. Activities and Measurement

Activity 1. (Jodi Forlizzi). In Year 1, we propose to collect and verify the following quantitative student data: demographics; admissions; matriculations; graduations; and demographics of our four undergraduate major programs (CS, Comp Bio, AI, HCI); demographics of our Master's programs; demographics of our PhD programs. Because faculty are highly influential, we will also collect faculty demographics and retention data. We will also collect qualitative data on the student experience, using the Data Buddies survey; student focus groups; and from faculty through interviews with current and departed faculty to better understand retention. *Year 1/Activity 1 Metrics*. Success will be determined by gaining a clear idea of whether there are gaps of persistence in our programs, and by discovering opportunities for mitigating these gaps.

Activity 2. (Nichole Merritt). In Year 2, we propose to develop new and extend existing activities to increase recruitment of students from groups that are underrepresented in computing. (We have an existing, centralized repository of BPC activities, which we routinely update, that provides more information about individual activities). We will leverage a number of ongoing programs within the School and focus in particular on an online recruiting event which we prototyped in 2020. *Year 2/Activity 2 Metrics*. Success will be measured by tracking applications, admissions and matriculations of URM students in years 2021-2024.

Activity 3. (Jodi Forlizzi). In Year 3, we propose to create a strategic plan for recruiting and retaining faculty from groups that are underrepresented in computing. This will be built on a synthesis and analysis of the data collected in Activity 1, and will leverage ongoing, successful efforts in the school. *Year 3/Activity 3 Metrics*. Success will be determined by tracking faculty applications, hires, and promotions in years 2021-2024.

We have created a centralized repository containing a BPC plan for the school, a list of successful community- and diversity-building efforts, and example PI BPC plans. We will continue to update these resources and outcomes relative to this plan. We will track student and faculty metrics using Year 1's data as a baseline.

Team: Jodi Forlizzi, SCS DEI Lead; Nichole Merritt, SCS Assistant Director of Administration, SCS Dean's Office; Tom Cortina, Assistant Dean of Undergraduate Education, SCS; David Garland, Associate Dean for Master's Programs, SCS; Robert Frederking, Associate Dean for Doctoral Programs, SCS.