Departmental BPC Plan
Department of Computer Science and Engineering
The Ohio State University

Effective dates of Plan: September 2020- September 2024
Contact: Prof. Anish Arora, Department Chair (arora.9@osu.edu)

1. Context

The Ohio State University (OSU) is a public research university committed to providing high-quality educational services to all. With over 65,000 graduate and undergraduate students, OSU is one of the largest American universities. In 2018, The Department of Computer Science and Engineering offered the 3rd most popular major (1,747 students). Among those students, there are 3 distinct statuses: **pre-major, in-major and graduating**. Pre-major (747, 43%) students are largely freshmen and sophomores that must achieve a certain GPA in required courses to advance. In-major students (1,000, 57%) have priority for senior-level classes and are tracked for graduation. Finally, graduating students completed the program during the academic year. The following chart provides demographic data from 2018.

	Women			**Men**		
	Pre-Major	In-Major	Graduating	Pre-Major	In-Major	Graduating
Asian	4.9% (37)	3.3% (33)	1.3% (4)	15% (119)	10% (107)	10% (31)
Black	1.6% (12)	0.5% (5)	0.3% (1)	3.3% (25)	1.3% (13)	1.2% (4)
Hispanic	1.0% (8)	0.5% (5)	0.3% (1)	2.4% (18)	2.2% (22)	2.1% (7)
White	5.8% (44)	7.9% (79)	8.8% (26)	45% (337)	53% (538)	56% (167)
Total	**127**	**149**	**41**	**538**	**851**	**255**

Table 1. Retention data by gender and ethnicity from pre-major to graduation.

We have highlighted the disparity in representation at all stages between Black women and White men: (1) The ratio of white men graduating is higher than the ratio of women graduating in general and for every subgroup. (2) Black and Hispanic women represent 2.6% of CSE pre-majors, but only 1.0% of in-major students and <1% of graduating students. (3) Black women are 3X more represented among pre-major than in-major students.

2. Goals

Our department embraces the opportunity to prepare each student for a promising career as computer science professional, including students from historically underrepresented groups (i.e., people who identify as women, Black, and/or Hispanic). We acknowledge that our department's culture has implicitly accepted, if not reinforced, systemic bias, sexism and racism. We believe that improving our department's culture will yield equitable retention rates, especially for groups at the intersection of underrepresented identities.

G1: Retention rates will be uniform by 2025 across all demographic backgrounds for the process of transferring from pre-major to in-major status (defined above).
G2: Retention rates will be uniform by 2025 for all demographic groups for the process of transferring from in-major to graduation. We are especially focused on demographics that experience intersectional systemic bias.
G3: Over 30% of faculty and staff will lead or participate in BPC activities by 2025, especially activities targeting equity in retention rates and reducing marginalizing experiences.

3. Activities and Measurement

A1: Cross-cutting Initiative (G1, G2, G3)

- A1a: Since 2019, the department has a standing Diversity and Inclusion committee. For this goal, we will increase faculty representation on this committee by 2X by 2025. Contact: Christopher Stewart, committee chair.
- A2a: The department will hire 2 new staff members to facilitate diversity and inclusion efforts including data collection, affinity group mentoring, and leading cultural and policy changes. We will add these positions by 2023 and 2025. Contact: Anish Arora

A2: Retention (G1,G2)

- A1a: Transform policies for admission to major. Using the Choose Ohio First Scholarship Program as a pilot, we are exploring improved, inclusive policies regarding the transition from pre-major to in-major status. Specifically, students are granted in-major status by maintaining a 3.0 GPA and completing community service goals (compared to the current policy which requires 3.4 GPA and written application). Early results showed equity in retention across gender, race, and ethnicity. We plan to scale this policy and extend to all students by 2024. Contacts: Raphael Wenger and Eric Fossler-Lussier
- A1b: Affinity groups in our department include: ACM-W, NSBE, SHPE, Women in Cybersecurity, Society of Women in Engineering. We will increase CSE faculty and staff advisors for these groups (currently 4) by 2X by 2024. Contact: Christopher Stewart

A3: Research Engagement (G2, G3):

- A3a: By 2025, 30% of CSE faculty will have leadership roles in a BPC activity. We will encourage faculty to write proposals that align with this departmental plan. By 2023, the Diversity and Inclusion committee will include a task force to help faculty craft BPC plans that strengthen our department's research through BPC. Contact: Christopher Stewart
- A3b: The department will increase outreach and engagement at conferences serving people from underrepresented groups. Faculty and staff will attend GHC, Tapia, OCWIC and similar conferences to (1) broadcast their own research to wider audiences, (2) make connections for faculty recruiting, and (3) support students from underrepresented groups involved in research. Contact: Anish Arora
- A3b: The department will continue to support BPC-focused outreach activities that enhance undergraduate education via research. Examples include the Explore CSR workshop series and HackI/O coding events. Contacts: Anish Arora, Mike Bond, Yang Wang