Departmental BPC Plan Department of Computer Science Binghamton University (SUNY)

Effective dates of Plan: December 2021 - present

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1. Context

Binghamton University (BU) is one of the four Centers in the State University of New York (SUNY) system, with a total student population of about 18,000. The campus is located in upstate New York in the Binghamton metropolitan area. The Computer Science Department, which is part of the Watson School of Engineering and Applied Science, offers Bachelors, Masters and PhD degrees, and enrolls more than 1,000 students who are taught by over 30 faculty members.

At the undergraduate level, in the Fall 2019 semester:

- The CS Department included 628 undergraduates; 110 (17.5%) were female and 98 (15.5%) were from groups that are underrepresented in computing: African Americans, American Indians including Native Alaskans, Hispanics or Native Pacific Islanders. These numbers increased from Fall 2010 (from 14.7% and 7% respectively), but remain too low.
- The Watson School (including CS) enrolled 23.8% female undergraduates and 15.8% students from groups underrepresented in computing.
- BU undergraduates were 50% women and 17.8% students were from groups underrepresented in computing.

We would like to increase both percentages of students in CS. The numbers reveal an opportunity to increase the percent of female students; to increase the percent of students from groups that are underrepresented in computing, we will need to grow them to exceed those of the school and university.

At the graduate level, the CS Department had 24% female students and 1.5% students from groups underrepresented in computing, in the Fall of 2019. 89% of CS graduate students are international students, limiting our ability to grow some numbers without growing the percent of domestic students.

Binghamton University, the Watson School, and the CS Department are all committed to diversity. The University recently established a Vice President for Diversity, Equity and Inclusion, and the Watson School has an Assistant Dean for Academic Diversity and Inclusive Excellence. We will continue to work with both of these offices to implement our plan.

2. Goals

- G1. more deeply the challenges related to attracting, retaining, and ensuring the success of students from groups that are underrepresented in computing. This effort will begin with enhanced data collection and dissemination, and we hope to ensure the continued receipt and analysis of data.
- G2. CS faculty and staff on the importance of BPC values, and develop BPC activities that every faculty member can participate in and contribute to.

G3.

3. Activities and Measurement

TowardG1 uderstanding how to attract, retain, and support students from underrepresented groups:

A1. Work with the Admissions Office to obtain and understand data about new and transfer applicants to the CS program. Questions about this data include: Do CS applicants from groups that are underrepresented in computing have academic profiles in high school or community college that are similar to students in the overall CS applicant pool? How do acceptance and enrollment rates compare? Are there opportunities to influence and adjust admissions decisions to help broaden participation in computing? [Coordinator: Lewis]

A2. Collect student performance data for different demographic groups, including percentages of students who (i) receive grades of D, F, or W in their first year, (ii) leave the CS program after freshman year, and (iii) do not graduate within four and five year windows. Produce an annual report for the full CS faculty and Watson College.4 (ap)-rd4 (t)2.3.003 Tw [J /TT:rPmeor Lewis]

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