## Departmental BPC Plan Computer Science William & Mary



Contact: Diversity Committee, Gang Zhou, Chair. cs-diversity-chair@cs.wm.edu

## 1. Context

William & Mary (W&M) is a public research university known for a rigorous liberal arts and sciences curriculum and dedicated, engaged professors (ranked #38 by U.S. News - National Universities). W&M demographics are (as of Fall 2021<sup>1</sup>):

- 6,543 undergraduate students (58.4% women; 15.5% URG<sup>2</sup>)
- 2,974 graduate (M.S., Ph.D., and certificates) students (57.3% women; 14.6% URG)

The Computer Science Department (CS@W&M) is part of the School of Arts & Sciences. CS@W&M offers B.S., M.S., & Ph.D. degrees. CS@W&M demographics are (as of Fall 2021):

- 173 undergraduate (majors) students (26% women; 12.1% URG)
- 83 graduate (M.S. and Ph.D.) students (24.1% women; 3.6% URG)

The Office of Diversity and Inclusion developed W&M's Inclusive Excellence Diversity Strategic Plan in Spring 2021 using the Inclusive Excellence framework outlined by the Association of American Colleges & Universities (AAC&U). W&M's DEI efforts involve 19 units/committees.

## 2. Goals

G1: Increase current representation of undergraduate women from 26% to at least 29% by 2025 and at least 33% by 2030.

G2: Increase current representation of undergraduate students from URG from 12.1% to at least 14% by 2025 and at least 15.5% by 2030 (to achieve parity with W&M's rate).

G3: Increase current representation of graduate women from 24.1% to at least 30% by 2025 and by at least 35% by 2030.

G4: Increase current representation of graduate students from URG from 3.6% to at least 5% by 2025 and 10% by 2030.

## 3. Activities and Measurement (faculty members in charge in bold)

A1: [ACM@W&M (G1-G4)] W&M's ACM student chapter hosts dozens of events per year including hackathons, Linux seminars, technical interview prep workshops, big/little (upperclass/incoming) mentoring sessions and others. The organization and its events are student-run and emphasize inclusion, and representation among women and students from URG is higher than in the classroom; three of the past five organization presidents have been women. Activities for PIs include (a) proposing diversity-oriented hackathon challenges and (b) new topics for seminars and workshops with applications of interest to women and students from URGs. PIs can also (c) work with the ACM chapter to maintain, refine, and measure their diversity efforts, such as by facilitating new introductions in the big/little program. Evaluation



 $<sup>^{1}</sup>$  Numbers are obtained from W&M's Qlik Enrollment App

<sup>&</sup>lt;sup>2</sup> URG = underrepresented groups in computing: Hispanic/Latino, Black or African American, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander

metrics include the number of competitors for hackathon challenges and participants for seminars, workshops, and mentorship programs. **Deverick, Zhou** 

A2: [Conferences (G1-G4)] CS@W&M regularly organizes women and students from URGs to attend annual events aiming to improve diversity in computing (e.g., Grace Hopper, Tapia, and the regional CAPWIC conference). Activities for PIs include (a) advertising these events, (b) providing recommendation letters and departmental grants, (c) organizing teams, and (d) recruiting prospective women students and students from URGs by attending these events. Evaluation metrics include the number of recommendation letters, the number of women students and students from URGs who attend or are recruited from these events, and the expenses supporting travels to these events. **Mao, Kemper, Willner, J. Li** 

A3: [Women in Computing (G1)] Society of Women in Computing (SWC) has twice received the Outstanding Community Service Award from ACM for encouraging interest in technology among middle school girls through the Berkeley Middle School after-school program. This program offers a 6-week robotics curriculum and aims to attract middle school girls to CS. Activities for Pls include (a) helping SWC to develop new curriculums, (b) enhance existing curriculums, (c) teach the curriculums at Berkeley, and (d) extend the program beyond Berkeley. Evaluation metrics include the number of curricula developed/enhanced, the number of SWC women students trained, and the number of middle-school girls outreached. **Smirni, Deverick, Mao** 

A4: [Undergraduate Mentoring (G1-G2)] W&M Scholars Awards are presented each year to distinguished women students and students from URGs. All W&M Scholars are encouraged to participate in undergraduate research programs. Activities for PIs include (a) writing recommendation letters and (b) advising undergraduate students' research supported by these programs. Evaluation metrics include the number of recommendation letters and the number of women and students from URGs mentored. **Lewis, Davis, Chaparro** 

A5: [Outreach to VA Students (G1-G4)] We plan to organize outreach activities to nearby high schools and colleges such as Richmond Community High School and Richard Bland Community College, which both have higher-than-average women and URG presence (61% women students and 70% students from URGs for RCHS and 59.5% women students and 30.6% students from URGs for RBC). Activities for PIs include (a) contacting women and students from URGs from these schools, (b) delivering talks there, and (c) identifying and contacting other similar schools. Measurement metrics include the number of talks delivered, and number of women and other students from URGs contacted. **Ren, Kumar, Poshyvanyk, Mao** 

CS@W&M closely tracks data to (1) assess the impact of our activities and (2) launch new activities when deemed necessary. Tools we plan to use to track the data include IPEDS, W&M's Qlik Enrollment App, and W&M Institutional Research.