The Status of Women of Color in Computer Science

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Summary

The National Academies of Sciences, Engineering and Medicine have identified the need for increasing the numbers of highly skilled people in our domestic science workforce. Women of color, who are being accepted in increasing numbers in US post-secondary institutions, represent a pool of domestic talent who could answer that need. However, historical practices of racism and sexism in STEM continue today as more subtle but persistent barriers that exclude women of color. Retaining women of color who choose STEM fields is a pervasive challenge. In computer science, for example, women of all races together represent fewer than 18% of undergraduate degree-earners and fewer than 23% of Ph.D. earners. Women of color make up less than half of that percentage at the undergraduate level and less one-sixth at the Ph.D. level. Initial efforts to examine factors impacting the success of women of color in computing point to both barriers such as a “digital divide” that separates women of color from others and social challenges for women of color in STEM higher education, as well as to supportive practices at minority-serving institutions and to alternative pathways to computer science degrees offered in various institutions. More and broader research is needed that highlights current successes of women of color in STEM as well as practical institutional solutions that could increase the numbers of women of color in STEM and ensure they persist until graduation.

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