

EDUCATIONAL STRATEGIES FOR BUILDING A DIVERSE GEOSPATIAL TECHNOLOGY WORKFORCE

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ABSTRACT:

This paper will present a template for increasing diversity in geospatial technology and related professions based on joint efforts of two Historically Black Colleges/Universities (HBCUs) from North Carolina, USA: North Carolina Central University (NCCU) and Fayetteville State University (FSU). We will argue that cultivating science degree programs at flagship HBCUs is one of the most important steps for improving the representation of women and African Americans in geospatial professions in USA. This is an important goal since geosciences, out of all science fields, have the worst record in terms of diversity. A comprehensive approach that includes collaboration with major research universities, certification opportunities for students and faculty, development of bridge-to-PhD program, close contact between students in the graduate and undergraduate programs, and partnership with geospatial associations will be described. The authors will also outline requirements and recent successes of creating a GEOINT Certificate at the undergraduate level developed and pioneered as collaborative effort. Both NCCU and FSU are planning to leverage this interdisciplinary offering to enhance the reach of geospatial technologies into allied disciplines. Special emphasis is also given to internship and networking opportunities since they are important gateways into the profession. These opportunities are especially important for minority students who face an additional barrier of not having role models and peers to introduce them to their line of work. Finally, the importance and impact of major external funding from National Science Foundation, National Aeronautics and Space Administration and National Geospatial Intelligence Agency on the quality of geospatial programs at both universities will also be discussed.

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