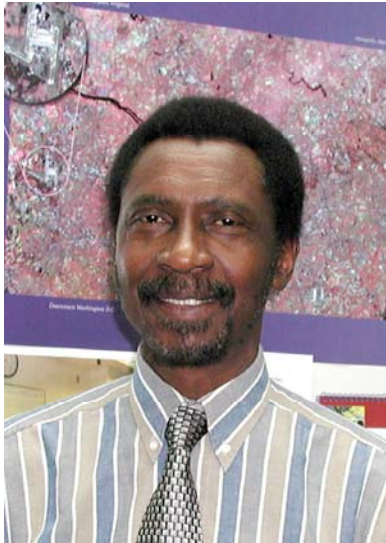


Increasing the Pool of ESS-trained Minorities

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Few minorities have been trained in the geosciences, especially in the areas of GIS and remote sensing



The noise from the printer alerted me to its position in the strange room. As I made my way to fetch my pages, a student reached out and grabbed them! She started to read the first page and as she noticed me standing and looking at her she realized they must be mine. "Please! Please! Can I get them?" she pleaded. I was lost for words. "They are just GIS materials," I replied. "Yes, I know! But can I get them?" she insisted. Seeing the way she looked at me, there was no other way but to consent. "Sure!" I replied. At that moment, she smiled and I noticed the glee on her face. After some discussions with her, two things became apparent. First, she was indeed sincere about wanting to learn about geographic information system (GIS) and second, she was very happy to hear that I would be developing and teaching GIS courses here at Morgan State University.

That was actually my first direct encounter with a Morgan student after arriving in Baltimore from NASA's Stennis Space Center. Thanks to a friend in Morgan's Computer Science Department, I had been given a small working space in that building so that I could do some work while waiting for my own office at the School of Engineering. It is usually very difficult for me to just "stand around" without doing something. Looking back, it seems fortuitous that, as I was waiting to start my new position, I met that student, because she gave me an extra motivation and strength to go on fighting for minorities in the geosciences.

Data have shown that there are very few minorities trained in the geosciences, especially in the areas of GIS and remote sensing; my own observations from attending GIS/remote sensing meetings have corroborated that fact. From my experience and from talking with others, I've concluded that key in the list of factors impeding the development of geosciences at HBCUs is cost. Geospatial technologies are very expensive, and installing and maintaining them require considerable amount of effort and time.



Coming to Morgan, the way I saw it was that something had to be done in order to change this trend. So, in the Spring of 1999, with help from the Dean of Morgan's School of Engineering, Dr. DeLoatch, I launched the Office of Spatial Data Analysis and Applications (OSDAA, with emphasis on the education and training of students in GIS and remote sensing with applications in STEM. Thus far, I have developed and taught five courses in GIS and remote sensing for both undergraduates and graduates.



Morgan's NASA ESSE21 Program has enabled me to further enhance the resource capabilities of OSDAA by acquiring more hardware, software (ENVI and ArcView licenses), and remotely sensed data (MSS, TM, SPOT, and IKONOS). All the courses in remote sensing and GIS now include lab exercises and other hands-on activities. Scores of students from several departments have utilized these technologies in their projects, theses, and dissertations. Some students have even gone on to graduate schools in other states to study GIS/remote sensing. OSDAA also participates regularly in summer

programs, providing access to all its resources. Morgan and the ESSE community remain committed to enhancing the geospatial resource capabilities of OSDAA in order to be able to accommodate more students, which will ultimately increase the pool of highly trained minorities in GIS and remote sensing for our nation.

ESS at Morgan State University

http://esse21.usra.edu/ESSE21/esse21_morgan.html