



ALUMNI SPOTLIGHT

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RODERICK UNDERGRADUATE RESEARCH APPRENTICESHIP PROGRAM ALUMNI

Sophomore studying engineering physics at
North Carolina A&T State University

WORDS OF ADVICE

“Do not be discouraged by the workload!
Approach each day with the mindset that
you will get better. Study and work diligently
and stay focused. This program will open
numerous doors and possibilities.”

BEST THINGS ABOUT THE PROGRAM

The best thing about the program was the exposure to highly sought-after research work and laboratory tools. I studied the properties of nanowires to determine how devices such as LEDs and solar cells will perform. Learning about nanowires and the importance of this work helped me realize the importance of STEM in my career. I would never have had the opportunity to use these laboratory tools had I not participated in the program. Another benefit was the opportunity to broaden my knowledge through graduate school-level material. It was challenging, but the experience has made me a better student.

AS A RESULT OF THE PROGRAM

The program allowed me to sharpen my skills as a physicist and engineer. The apprenticeship program introduced me to Comsol Multiphysics, a numerical solutions software that builds computer-generated models of real-world nanowires. These models allow us to generate an approximation of how our nanowires will perform before we enter the laboratory, which cuts costs and reduces laboratory time. After I became proficient in Comsol, my principal investigator, Dr. Shanthi Iyer, invited me to join the research team permanently at the Joint School of Nanoscience and Nanoengineering at North Carolina A&T State University.

HOW PARTICIPATING IN AEOP INSPIRED YOU TO ADVANCE IN STEM

After participating in the program and working with Dr. Iyer, I realized that pursuing a Ph.D. is a challenging but achievable goal. Although this work is no easy task, the apprenticeship program gave me the opportunity to learn some of the skills necessary for conducting rigorous research. I now plan to pursue a Ph.D. in electrical engineering at NC A&T after I complete my undergraduate program.

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