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Major:  
Chemistry, B.S. 2003

Faculty Advisor:  
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Program:  
Research Alliance for Minorities

Research Area:  
Computational Chemistry

The aim of the research is to determine which *ab initio* methods best modeled the interaction of the microscope tip with a carbon nanotube. There is heightened interest in developing materials with unique electronic, chemical, and mechanical properties. In this project computer simulation is used to understand and design atomic force microscopy and scanning gate microscopy experiments, which are important for characterizing new materials.

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