

**COLLEGE OF ENGINEERING**  
**Department of Electrical and Computer Engineering and Computer Science**

**SUMMER RESEARCH OPPORTUNITIES**  
**FOR UNDERGRADUATE WOMEN**

**APPLICATION DEADLINE: MARCH 1, 2005**

*The Department of Electrical and Computer Engineering and Computer Science is pleased to offer the following research project for the summer of 2005. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and if possible, develop a timetable for the twelve-week research period.*

**Nanoelectronics for the 21st Century**

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This project is directed at examining one of several exciting new technologies that may revolutionize the electronics industry in the next decade or so as the silicon integrated circuit industry approaches some fundamental physical limits. Several of these promising new technologies are carbon nanotubes, spintronics (electronics based on the spin rather than the charge on the electron), quantum dots and computing and molecular electronics. This project would explore the state-of-the-art in one of these technologies and explore the potential, the applications and the problems that exist.