

## Women@CENS: A research system

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### Purpose of the program

#### Women in Engineering

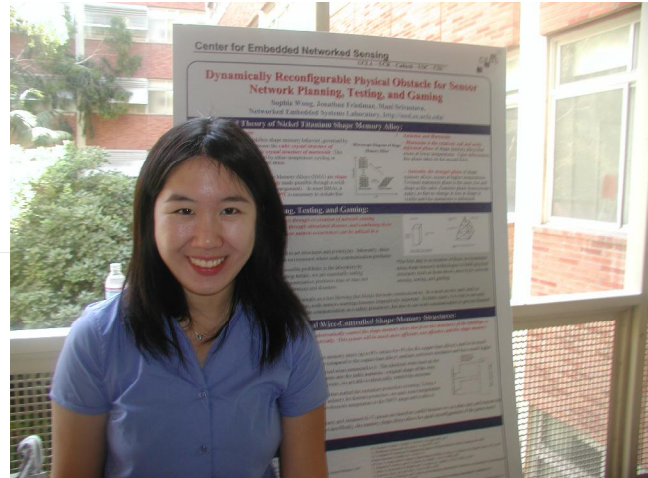
Although we have seen progress over the last few decades, women still lag far behind their male counterparts, especially at the doctoral level, in the fields of engineering and computer science. In an attempt to counteract women's persistent underrepresentation, pre-college and college experiences have been the focus of both intervention and research endeavors. Despite such efforts, there is one crucial educational component of a woman's undergraduate experience that remains somewhat of a mystery: the undergraduate research experience.

#### Goals of the program

- Identify best practices and strategies inherent in successful undergraduate research programs
- Develop a demonstration model of an undergraduate research program that can be shared
- Promote women's long-term commitment to science and engineering

### Description of the program

Twenty-five female and twenty-two male students from colleges and universities across the nation participated in a 10-week intensive summer research internship at CENS partner institutions. Students worked closely in groups with faculty and graduate student mentors on a variety of projects in the fields of engineering and computer science and presented their work at the end of the program. Students also attended bi-weekly lunch meetings led by guest speakers that addressed topics of gender equity, mentoring, and careers and graduate education in engineering. Voluntary lunch meetings were hosted for female students to allow them to share their experiences and develop networks for support.



### Evaluation of program: Purposeful assessment



An integrated evaluation approach employing both quantitative and qualitative methods was applied to the program. Assessment components consisted of:

- student surveys
- separate gender student focus groups
- faculty mentor interviews
- graduate student mentor focus groups
- observations of laboratory meetings and research activities
- student electronic journal entries

These activities served multiple purposes: to collect formative and summative feedback on the program, to further understanding of gender issues in engineering, and to provide students a

