

University of Illinois Department of Computer Science Gender Equity Initiatives: ChicTech and the Technical Ambassadors Competition.

It is broadly recognized that the participation of women in the study of computer science (CS) at the undergraduate level is at an all time low. Fewer girls are entering CS programs nationwide, and those who do are dropping out of the major at a higher rate than their male classmates. The UIUC Department of CS aims at narrowing this gender gap by a series of equity initiatives designed with the specific goals of recruiting more women to apply, and of retention of existing women in the program. One of the most innovative of these initiatives is the ChicTech/Technical Ambassadors Competition project.

The basic strategy for recruiting high school girls to apply to the computer science department has been simple: involve current female undergraduate students in solving the problem. In a program dubbed ChicTech, students from the Women in Computer Science (WCS) organization have visited 8 Illinois high schools, addressing more than 300 girls, to give younger students an idea of what it means to study computer science in college. At these recruiting assemblies, they have initiated a technical contest --the Technical Ambassadors Competition -- in which teams of female high school programmers provide software development for a community organization. The approximately 50 students participating in the Technical Ambassadors Competition will visit the UIUC campus for a weekend celebration of achievement and service as the culmination of the competition. This event is planned and hosted by undergraduate women members of WCS.

The department of CS is working with the WCS organization to foster a deep sense of community and collaboration among its members with the primary goal of retention in the major. The undergraduate women who participate in the recruiting trips for the ChicTech project, and who are administering the Technical Ambassadors Competition, have created an infectious enthusiasm for the study of computer science that benefits not only the high school students they meet, but themselves and their peers as well. This symbiotic effect of the project, addressing the twin goals of recruiting and retention, makes it unique among our initiatives.

We propose a panel consisting of 2 undergraduate ChicTech leaders from the University of Illinois WCS organization, 2 high school participants in the Technical Ambassadors Competition, a high school computer science educator and Technical Ambassadors Advisor, and a WCS Advisor from the department of CS. The WCS Advisor, Deb Israel, Director of Development for the Department of Computer Science, is largely responsible for the conception and early implementation of the project.

After a 20 minute description of the ChicTech/Technical Ambassadors Competition project, the panel will spend approximately 40 minutes addressing audience questions about their personal experiences in the project, about their various roles in recruiting and retaining women in the study of computer science, about their visions for future projects, and about other ongoing initiatives at the University of Illinois. Aside from the obvious

goal of sharing their experiences, the panel will be interested in facilitating a broad discussion among session attendees of “what works,” (and what doesn’t) for equity initiatives in the undergraduate study of computer science.