Big bang at NCWIT

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MSU Engineering causes big bang at NCWIT Summit

Having actress Mayim Bialik, from the TV comedy *Big Bang Theory*, at the 2015 National Center for Women & Information Technology (NCWIT) Summit seemed fitting given the “big bang” MSU Engineering made at the event.

Hundreds of educators, entrepreneurs, corporate executives, and social scientists shared research, ideas, and action items for increasing girls' and women's participation in computing during the “2015 NCWIT Summit on Women and IT: Practices and Ideas to Revolutionize Computing,” May 19-21 at Hilton Head Island, S.C.

Bialik, who plays the character Amy Farrah Fowler on the popular TV comedy, was among the featured speakers and gave a keynote address at the NCWIT Summit, where MSU Engineering received multiple national recognitions. They include:

**NEXT Award**

MSU's Departments of Computer Science and Engineering, Electrical and Computer Engineering, and Mechanical Engineering were the recipients of the 2015 NCWIT Extension Services Transformation Award of $50,000 (a second-place tie).

The NEXT Award recognized MSU's “broad-range of well-conceived recruitment and retention efforts.” Dean Leo Kempel and Teresa Isela VanderSloot, director of Women in Engineering Recruitment and K–12 Outreach, accepted the award on behalf of a college-wide team leading these efforts.

MSU was also commended for its active participation in the NCWIT Academic Alliance, including developing key resources for use by other schools, and its participation in the NCWIT Aspirations in Computing program.
EngageCSEdu

Associate professors of Computer Science and Engineering Richard Enbody and William Punch were recognized by NCWIT and Google with an EngageCSEdu Engagement Excellence Award. The award included a $5,000 cash award.

NCWIT EngageCSEdu is a growing collection of high-quality materials for introductory undergraduate computer science courses created by faculty across the country. All of the peer-reviewed materials in the collection employ a number of “engagement practices” that research suggests are likely to engage students, especially women and other underrepresented groups.

Punch and Enbody were recognized for their extensive collection of projects that are designed to create interdisciplinary connections between computer science and various technical disciplines. This collection of materials incorporates student choice with meaningful and relevant content.

“We are finding that non-majors gain useful programming skills, and CSE majors are better problem solvers after taking the course,” Enbody explained. They shared those exercises online, and as instructors from other institutions began using them, the work caught the attention of Google and its efforts to make an introduction to computer science more engaging.

To support their class, Enbody and Punch wrote the book *The Practice of Computing using Python*. They are currently working on the third edition. Together, they developed an online version of CSE 231 using an innovative paradigm.

The Google Engagement Award is an unrestricted gift. They plan to use the funding to bring computer scientists from underrepresented groups to speak to students.

NCWIT Collegiate Award for Angela Sun

An application for mobile phones, known as You++, earned MSU computer science senior Angela Sun recognition by NCWIT.

Sun, of Canton, Mich., was one of three women honored by NCWIT and HP as inaugural winners of the NCWIT Collegiate Award. The award encourages women undergraduates to persist in computing majors by recognizing their impressive innovations.

She was recognized for her mobile application that allows Android users to discover patterns that affect their battery life, such as the amount of time spent on apps, most used apps, and the number of times a phone is accessed in a day. The app is available worldwide on the Google Play Store for free. It is compatible with both phones and tablets, but requires Android 4.2 or newer.

Sun is a research student in the Systems and Security Lab in MSU’s Department of Computer Science and Engineering.

She is spending this summer as one of only 30 product manager interns at Google in California.