Engineering Teams Break Down Communication Barriers

Can you see me now? Sign language over cell phones

Deaf and hard-of-hearing Americans are a step closer to using sign language to communicate over a mobile phone. A UW team led by Eve Riskin, professor of electrical engineering, has developed software that enables two-way real-time video communication and has received a National Science Foundation grant for a 20-person field project to begin next year. A video of the prototype posted on YouTube has drawn many emails. "A lot of people are excited about this," Riskin said. Mobile video sign language won't be widely available until a commercial cell-phone manufacturer agrees to provide the service.

- For more information: http://mobileasl.cs.washington.edu/index.html. The video is posted at http://youtube.com/watch?v=FaE1PvJwl8E.

Online service lets blind surf the Internet from any computer, anywhere

Roughly 10 million people in the United States are blind or visually impaired. Use of a computer has required special screen-reading software typically installed only on their own machines. New software called WebAnywhere now lets blind and visually impaired people surf the Web on the go. The tool reads aloud Web text on any computer with speakers or headphone connections. Jeffrey Bigham, a Computer Science & Engineering doctoral student, developed WebAnywhere under the supervision of Professor Richard Ladner. NSF funded the research. On July 8 in Paris, Bigham won the Accessible Technology Award for Interface Design at the Imagine Cup, a worldwide student programming contest sponsored by Microsoft.

- The free program with audio and video demonstrations can be viewed at http://webanywhere.cs.washington.edu.

For your eyes only: custom interfaces make clicking faster, easier

Open any computer program and you're largely subject to a design team's ideas about button sizes, fonts, and layouts. Off-the-shelf designs are especially frustrating for people with disabilities and the elderly. A new approach for design would put each person through a brief skills test and then generate a customized version of the user interface optimized for his or her vision and motor abilities. Computer Science & Engineering doctoral student Krzysztof Gajos and Professor Dan Weld designed the system, called Supple.The first applications will likely be Web-based.

- For more information and a video demonstration: http://uwnews.org/article.asp?articleID=42817