Improving Accessibility of Airport Security for the Deaf

American Sign Language (ASL) is the language of the Deaf in North America and is the third most widely used language in the United States. Contrary to common belief, ASL is not English. While they share some vocabulary, the grammars of the two languages are extremely different. Translating between the two poses the same challenges as translating between any two natural languages.

Currently, human ASL interpreters are frequently necessary to facilitate communication between deaf and hearing people. Good interpreters are in high demand and are not always available. This creates barriers for deaf people when carrying out day-to-day business in the hearing world such as negotiating a security checkpoint at an airport. The goal of the ASL Project at DePaul University is to create a system that translates spoken or written English into 3D animations depicting American Sign Language. This system will be helpful in brief, specific interactions such as airport security where a human interpreter is not available.

Such a system draws on many areas of computer science: computer graphics, human–computer interaction, machine translation, and speech recognition. Our first end-to-end functioning prototype was designed to make airport security more accessible to the Deaf. This talk will describe some of the considerations and challenges in building this prototype and include a demonstration of the prototype.

by Dr. Rosalee Wolfe

Friday, March 5th 2004, 5:30pm–6:30pm

Loop Campus, CTI building, Room # 226

Refreshments will be provided

About The Speaker

Rosalee Wolfe is a Professor in the School of Computer Science, Telecommunications and Information Systems at DePaul University. As the Division Director of Human–Computer Interaction and Computer Graphics, she was instrumental in establishing DePaul’s degree programs in Human–Computer Interaction, and Computer Graphics and Animation. She received a Ph.D. in Computer Science from Indiana University, was a NASA fellow at Johnson Space Center, served on various committees of ACM SIGCSE and SIGGRAPH, and is the team lead for DePaul’s American Sign Language Project. For more information, visit her homepage at http://condor.depaul.edu/~rwolfe/

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