

## Invited Speaker

Dr. Kathleen F. McCoy  
University of Delaware

### Natural Language Generation and Assistive Technologies

#### Abstract

Some people with disabilities find it difficult to access some forms of language. Assistive Technology is a term used to describe a class of technologies/interventions designed to enable people with disabilities to do things that their disabilities currently make difficult. A large amount of work on Assistive Technology has focused on enabling access to language and communication; this class of interventions could greatly benefit from Natural Language Generation technologies.

This talk will briefly survey some Assistive Technology applications that have employed Natural Language Generation technologies – highlighting some of the needs in this application area along with the opportunities that it provides for investigating hard problems in Natural Language Generation. It will then highlight a project, called the SIGHT System, intended to provide access to information graphics (e.g., bar charts, line graphs) found in popular media to people who have visual impairments. This system employs Natural Language Generation technologies to generate appropriate textual summaries of the information graphics. As such, it makes contributions to several areas within the field of Natural Language Generation while also enabling access to the information in these graphics to people who cannot access it with visual means.

#### Biography

Dr. Kathleen F. McCoy is a professor in the Department of Computer and Information Sciences at the University of Delaware. She received her PhD from the University of Pennsylvania in 1985 with a dissertation in the area of Natural Language Generation, and has been at the University of Delaware ever since then. Shortly after joining Delaware, she began working in applying Natural Language Processing to Assistive technologies at the Center for Applied Science and Engineering in Rehabilitation at the University of Delaware and the DuPont Hospital for Children. She served as the Center's director from 2000-2009. She received a University of Delaware Excellence in Teaching Award in 1997, a University of Delaware Excellence in Advising Award in 2001, and a College of Arts and Science Outstanding Advisor Award in 2003. From 1995-2008 she served on the ACL Executive committee in various capacities including 10 years as Treasurer. She is the founding President of the ACL Special Interest Group on Speech and Language Processing for Assistive Technologies (2011). She has been an organizer of several workshops on that area associated with various ACL conferences. She was program co-chair of the User Modeling Conference in 2007, the ACM SIGACCESS Conference on Computers and Accessibility in 2009, and the General Chair of that same conference in 2011. She is a Senior Member of the ACM.