| Home | About ▼ | Focus Areas ▼ | Research ▼ | Divisions ▼ | Programs ▼ | News ▼ | Events ▼ | Computing Resources ▼ | Jobs | Contact Us | Log In | LSU ▼ |

Events

Current Events
Lectures▼
Events Archive▼

CCT Colloquium Series

Auditory Displays, Auditory Graphs, and Sonifications: Research and Design

Bruce N. Walker, Georgia Institute of Technology

Sonification Lab

Johnston Hall 338
April 20, 2007 - 03:00 pm

Abstract:
Auditory displays and sonification can be highly effective when there is a loss of vision (darkness, smoke, disability), or when the data to be presented are complex, multivariate, and time-dependent. Unfortunately, there is very little guidance available to designers of auditory displays, and what is out there is often not based on empirical foundations. In addition, there are many technical and practical hurdles to overcome when working with sound. The Sonification Lab at Georgia Tech seeks to rectify this by empirically studying the perceptual, cognitive, and technical issues related to non-visual interfaces, and then implementing our findings in effective systems. In this talk I will briefly discuss when and where sound is an effective display modality, and then present an overview of our research on auditory displays, auditory graphs, sonification, training, and individual differences in perceiving and understanding such interfaces.

Speaker's Bio:
Professor Bruce Walker holds a joint appointment in the School of Psychology and the School of Interactive Computing at Georgia Tech. His interdisciplinary Sonification Lab studies the human-computer interaction (HCI) issues in non-traditional computing environments, ranging from mobile devices, to cockpits and vehicle displays, to multimodal interfaces in complex task environments such as in the International Space Station. He teaches courses on Sensation and Perception, Engineering Psychology, Human-Computer Interaction, Auditory Interfaces, and Assistive Technology. Professor Walker holds a BSc in Physics from McGill University, and a MS and PhD in Psychology (Human Factors) from Rice University. In addition to academic research leading to over 50 journal articles and conference papers, he has worked and consulted on projects for NASA, state and federal governments, private companies, and the military. Dr. Walker is currently the President of the International Community for Auditory Display (www.icad.org).

Refreshments will be served.

LSU