ThinkSpatial

The UCSB brown-bag forum on spatial thinking

Presents

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Enhancement of spatial cognition and wayfinding for vision-impaired travelers using remote infrared audible signage

Ellison 5824, 12:00 p.m. 4 March 2009

Abstract: Visual perception is the major sense used to navigate throughout the environment and restricted or total loss of vision greatly impacts the ability to travel successfully. A “real world” experiment with blind travelers using location-based infrared auditory signage will be discussed. This work goes well beyond the common measurement of time or success of tasks when evaluating efficacy of assistive technologies, and looks at spatial and subjective measurements, including the ability to make shortcuts, understanding of spatial relationships, perceived changes to travel frequency, and access to activities and other “quality of life” issue relating to interaction with the urban environment.

James Marston is an Assistant Researcher in the Department of Geography at UCSB. He earned his Ph.D. in 2002 in Geography with an Emphasis in Cognitive Science from UCSB and spent the next 5+ years as a post doc conducting research on UCSB’s Personal Guidance System (PGS). Currently, he is the Principal Investigator at UCSB on a collaborative research project “The Wayfinding Project: Fundamental Issues in Wayfinding Technology” funded by the National Institute on Disability and Rehabilitation Research. His main research responsibilities include a comprehensive survey of need, travel planning behavior and use, and measures of travel performance. His overall interests include environmental perception, spatial behavior, wayfinding and the spatial problems encountered by those with disabilities, especially visual impairments.

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The objectives of the ThinkSpatial brown-bag presentations are to exchange ideas about spatial perspectives in research and teaching, to broaden communication and cooperation across disciplines among faculty and graduate students, and to encourage the sharing of tools and concepts. Please contact Don Janelle (ext 5267, janelle@spatial.ucsb.edu) to review and schedule possible discussion topics or presentations that share your disciplinary interest in spatial thinking.