

Signal Processing Seminar

Title: #1) Multimodal DSP for Automatic Language Acquisition
#2) Statistical Speech Technology Group

Speakers: Professor Stephen Levinson's Group
Electrical & Computer Engineering
University of Illinois-Urbana

Professor Mark Hasegawa-Johnson's Group
Electrical & Computer Engineering
University of Illinois-Urbana

Date: Wednesday, February 18, 2009

Time: 4:00 - 5:00 pm

Where: 4269 Beckman Institute

Prof. Levinson's Abstract: To allow a robot to learn language it must have a complete sensorimotor periphery. This requires the integration and processing of video, audio, tactile, haptic, and proprioceptive signals. We describe some two models for such signals one based on Hidden Markov Models and the second called a Hierarchical Temporal Memory (HTM).

Prof. Hasegawa-Johnson's Abstract: The second half hour will provide a brief overview of research in the Statistical Speech Technology group, including brief summaries of six of our current research projects. Projects to be discussed will include speech perception, multi-microphone speech processing, data-driven dictionary design, non-speech acoustic event detection, landmark detection, and semi-supervised learning.