Exploring Auditory Processing & Applications
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Past: Models of auditory processing
Novel features for audio applications

Present: Modeling of speech intelligibility and detection
State of the art applications in music and law enforcement

Future: Applications in auditory segregation
Intelligent hearing aids and prosthetics

Temporal Coherence and Scene Analysis

Integrated MEMS Sensors and aVLSI System Implementations

Intelligent MEMS sensors & tracking robots
Platform-noise reduction algorithms
Hybrid digital and analog neuromorphic circuits
Cochlear chips and real-time cortical DSP

National Insitutes of Health, National Science Foundation, and the Department of Defense
Neural Systems Laboratory