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Alexander I. Rudnicky is a Research Professor in the Computer Science Department, School of Computer Science at Carnegie Mellon University. He also has an appointment in its Language Technologies Institute. Dr. Rudnicky received a PhD in Cognitive Psychology (speech perception) from Carnegie Mellon in 1980 and has since worked in the areas of automatic speech recognition, spoken language interaction and machine learning.

Dr. Rudnicky's research has spanned many aspects of spoken language, including knowledge-based recognition systems, language modeling, spoken language system architectures, multi-modal interaction, the analysis of conversational structure, and design principles for speech interfaces. He has investigated the rapid prototyping of systems for speech-to-speech translation. More recently Dr. Rudnicky has been active in research into spoken dialog, and has made contributions to dialog management, language generation and the computation of confidence metrics for recognition and understanding. He is interested in spoken language interaction in groups that include humans and robots. Making this a reality requires developing dialog strategies that can handle multi-participant conversations; it also requires understanding the process of dialog-mediated grounding as well as developing techniques that allow robots understand and clarify human directions. Dr. Rudnicky is interested in several aspects of learning, including the induction of concepts and structure from speech and the design of intelligent systems that proactively seek to acquire knowledge from people.

A list of publications and other information may be found at http://www.cs.cmu.edu/~air

