Studying the Lack of Invariance Problem in Speech Perception from an Ecological Perspective

Navin Viswanathan Department of Communication Sciences and Disorders Pennsylvania State University

Several factors such as different speakers, dialects, speaking rates, and phonetic contexts affect the speech signal in spoken communication. Despite this apparent variability or lack of invariance, spoken communication is remarkably successful. In this talk, I will examine different theoretical accounts of how speech listeners solve this issue and argue for an approach that takes seriously the challenges that speech perceivers encounter in everyday listening. I will then present a collaborative word recognition paradigm which takes steps in this direction and present preliminary data. I will conclude by examining how paradigms such as this can improve accounts of spoken language use as well as find use in more applied domains.



Navin Viswanathan received his Ph.D. in Language & Cognition from the University of Connecticut in 2009. He recently joined the Department of Communication Sciences and Disorders at Penn State as an Associate Professor. His research interests involve the study of cognitive and social factors that underlie spoken language use in monolinguals, bilinguals, and in those with speech and hearing impediments.