Kevin Woods

Curriculum Vitae 270 Norfolk St., #5 Cambridge, MA 02139 +1-617-233-7061 kwoods@mit.edu kevinjpwoods.com

Education

PhD Student, 2012 – *(expected 2017)* Harvard Program in Speech and Hearing Biosciences and Technology Harvard Division of Medical Sciences

B.S., Neural Science, New York University, 2012

Research Positions

McDermott Lab - Graduate student, June 2013 -

Computational Audition Laboratory Massachusetts Institute of Technology, Department of Brain and Cognitive Sciences

Schlaug Lab – Research assistant, Rotation student, May 2012 - Feb. 2013

Music and Neuroimaging Laboratory Beth Israel Deaconess Medical Center and Harvard Medical School

Poeppel Lab – Research assistant, Feb. 2010 - June 2012

Auditory Perception and Cognition Laboratory New York University, Center for Neural Science and Department of Psychology

Snedeker Lab - Research assistant, March 2008 - Aug. 2009

Lab for Developmental Studies Harvard University, Department of Psychology

Research Interests

- Scene analysis / Multitalker environments
- Selective attention
- Salience / distraction
- Speech perception

Publications

Preprint- Woods, K.J.P., Siegel, M., Traer, J., McDermott, J.H. (2016) Headphone screening to facilitate web-based auditory experiments. PsyArXiv. https://osf.io/preprints/psyarxiv/aez6f/

Woods, K.J.P., McDermott, J.H. (2015) Attentive tracking of sound sources. Current Biology.

Tian, X., Zarate, J.M., **Woods, K.J.P.**, Poeppel, D. (2015) Multiple levels of linguistic and paralinguistic features contribute to voice recognition. *Nature Scientific Reports*.

In prep: Woods, K.J.P., McDermott, J.H.

Rapid implicit learning of sound schema for the cocktail party problem.

Under review: **Woods, K.J.P.**, Siegel, M., Traer, J., McDermott, J.H. Headphone screening to facilitate web-based auditory experiments.

Conference Talks

Rapid schema-learning for the cocktail party problem

Association for Research in Otolaryngology (ARO) 2017, February 12th, 2017 Invited session- 'Patterns in sound sequences'

Principles of Auditory Scene Analysis for Audio Synthesis

Audio-Visual Synthesis Workshop, Dartmouth College, October 11, 2014 Sponsored by Bregman Media Labs and the Neukom Institute Invited talk

Attentive Tracking of Sound Sources

Association for Research in Otolaryngology (ARO) 2014, February 26th, 2014

Speech-Music Auditory Chimeras: Developing a Novel Stimulus for Neuroimaging

NYU Undergraduate Research Conference, April 15th 2011 Poster adaptation presented at the University of Pennsylvania 13th Annual Summer Undergraduate Workshop in Cognitive Science and Cognitive Neuroscience, June 16th, 2011

Posters

Perceptual Learning of Feature Trajectories (Kevin Woods & Josh McDermott) ARO 2016, February 21st, 2016. Updated at presented at ASA 2016, May 23rd, 2016.

The Representation of Unattended Sounds can be Probed by Crowdsourcing (Kevin Woods & Josh McDermott) ARO 2015, February 26th, 2015.

Replacing Sound Piecemeal (Kevin Woods) Audio-Visual Synthesis Workshop, Dartmouth College, October 11th, 2014.

Intelligibility of Spectrally Asynchronous Speech (Kevin Woods & David Poeppel)

NYU Undergraduate Research Conference, April 13th 2012. Group Winner

<u>Awards</u>

- NIH T32 training grant / fellowship
- ARO 2014 Travel Award. \$500
 Project: Attentive Tracking of Sound Sources

- Dean's Undergraduate Research Fund (DURF) Award, February 2011. \$300 Project: *Spectrally Asynchronous Speech*
- University of Pennsylvania 13th Annual Summer Undergraduate Workshop in Cognitive Science and Cognitive Neuroscience, June 5th – June 18th, 2011. Merit-based, fully funded program (NSF/UPenn).

Skills and Qualifications

- MATLAB, PRAAT, html/JS, SPSS
- Extensive experience in auditory psychophysics
- Crowdsourcing/MTurk (developed novel methods for auditory crowdsourcing)
- DAW experience including Ableton, Sonar/Cakewalk
- Speech analysis and signal processing
- Familiar with EEG, MEG and (f)MRI; MRI safety trained
- Have worked with children in a research environment

Professional Experience

Harvard COOP Bookstore, Cambridge, MA Bookseller, Dec. 2007 – Aug. 2009