

Adam C. Lammert

Ph.D. Student

2nd Year

Department of Computer Science

Advisor: Shrikanth Narayanan

University of Southern California
3740 McClintock Avenue, EEB 400
Los Angeles, CA 90089

Education

North Carolina State University 2006

M.S.

Concentration:

Computer Science

Thesis:

“Searching for Better Logic Circuits: Using Artificial Intelligence Techniques to Automate Digital Design”

Vassar College 2004

B.A. (cum laude)

Concentrations:

Cognitive Science

Computer Science

Thesis:

“Helical Klinotaxis Allows for Robust Stimulus Orientation”

Teaching Experience

Teaching Assistant 2005

North Carolina State University

Courses:

Architecture of Parallel Computers

Computer Organization & Logic

Class Intern 2002-4

Vassar College

Courses:

Research Methods in Cognitive Science

Perception & Action

Research Experience

Research Assistant 2009

University of Southern California

Signal Analysis and Interpretation Laboratory (SAIL)

Speech Perception and Articulation Knowledge (SPAN) Project

Lab Manager 2006-8

East Bay Institute for Research and Education

Speech and Hearing Research Laboratory

Managed in a wide variety of tasks related to auditory research, including experimental design and oversight, data analysis, dissemination of findings, computational modeling and equipment maintenance

Research Assistant 2003-4

Vassar College
Biomechanics Advanced Research Laboratory
Designed, built and tested several biologically-inspired robotic and computational systems

Research Intern 2001
State University of New York at Buffalo
Contextual Vocabulary Acquisition Project
Designed and implemented intelligent systems for automatically acquiring the semantics of novel words

Fellowships and Awards

Annenberg Foundation Graduate Fellowship 2008-10
University of Southern California
Signal Analysis and Interpretation Laboratory (SAIL)
Given funding for 2 years of tuition and stipend, supporting research related to speech and communication

NSF Joint Fellowships 2007
Ecole Normale Supérieure (Paris, France)
Laboratoire de Psychologie de la Perception
Awarded with funding for 2 months of collaborative research, benefiting ongoing projects in auditory research

Undergraduate Research Fellowship 2003
Vassar College
Undergraduate Research Summer Institute (URSI)
Received stipend for 3-month intensive research program, focusing on biologically-inspired robotic models of animal locomotion

Memberships

The Acoustical Society of America
Student member since 2009

Psi Chi, The National Honors Society in Psychology
Member since 2003

Extracurricular Activities

Student Fellow 2001-3
Vassar College Office of Residential Life
Acted as dormitory residential advisor and peer counselor

Journal Articles

Long, J.H. Jr., Koob, T.J., Irving, K., Combie, K., Engel, V., Livingston, N., Lammert, A.C. and Schumacher, J. (2006). Biomimetic evolutionary analysis: Testing the adaptive value of vertebrate tail stiffness in autonomous swimming robots. *J. Experimental Biology*, 209: 4732-4746.

Long, J.H. Jr., Lammert, A.C., Pell, C.A., Kemp, M., Strother, J., Crenshaw, H.C. and McHenry, M.J. (2004). A navigational primitive: biorobotic implementation of cycloptic helical klinotaxis in planar motion. *IEEE J. Oceanic Engineering*, 29: 795-806.

Conference Proceedings

Lammert, A., Bresch, E., Byrd, D., Goldstein, L., and Narayanan, S. (2009). An articulatory study of lexicalized and epenthetic schwa using real time magnetic resonance imaging. For the *157th Meeting of the Acoustical Society of America* in Portland, Oregon (Poster presentation).

Lammert, A., Ellis, D. and Divenyi, P. (2008). Data-driven articulatory inversion incorporating articulator priors. In Proceedings of the *Tutorial and Research Workshop on Statistical and Perceptual Audition (SAPA-2008)*. International Speech Communication Association, Brisbane, Australia (Oral presentation).

Long, J.H. Jr., Lammert, A.C., Strother, J. and McHenry, M.J. (2003). Biologically-inspired control of perception-action systems: helical klinotaxis in 2D robots. In Proceedings of the *13th International Symposium on Unmanned Untethered Submersible Technology (UUST)*. Autonomous Undersea Systems Institute, Lee, NH (Oral presentation).

Book Chapters

Divenyi, P., and Lammert, A. (2007). The time course of listening bands. In *Hearing – From sensory processing to perception*, B. Kollmeier, G. Klump, V. Hohmann, U. Langemann, M. Mauermann, S. Uppenkamp, and J. Verhey (Eds.). Berlin, Heidelberg (Germany): Springer Verlag.

Wessel, D., Divenyi, P. and Lammert, A. (2006). Dynamics of the Singing Voice. Section Introduction In *Dynamics of Speech Production and Perception*, P.L. Divenyi & G. Meyer (Eds.), Amsterdam (Netherlands): IOS Press.