Sridhar Srinivasan, Ph.D.

Acoustics Research Institute, Austrian Academy of Sciences
Wohllebengasse 12-14/1, Vienna A-1040, Austria
Email: ssri.oeaw@gmail.com Phone: +43 677 61382461
ORCID: https://orcid.org/0000-0002-6818-7356
Website: ssrini23.github.io

Education & Work Experience

2019 – present	**Research Scientist:** Acoustics Research Institute, Austrian Academy of Sciences, Austria.
2015 – 2019	**Postdoctoral Scientist:** Acoustics Research Institute, Austrian Academy of Sciences, Austria. Mentor: Dr. Bernhard Laback
2011 – 2014	**Ph.D. in Cognitive and Behavioral Neuroscience;** Department of Psychology, University of Florida, USA. Advisor: Prof. David W. Smith **Title:** Selective attention modulates peripheral auditory function
2007 – 2011	**Master of Science;** Department of Psychology, University of Florida, USA. Advisor: Dr. Linda Hermer **Title:** Transient synchrony among motor cortical neuronal ensembles during olfactory stimulus anticipation in a go/nogo task
2005 – 2007	**Programmer:** Human Motor Performance Laboratory, College of Public Health and Health Professions, University of Florida
2005 – 2006	**Software Consultant:** Hermer Lab, Department of Psychology, University of Florida, USA.
2004 – 2006	**Master of Science;** Department of Electrical Engineering, University of Florida, USA. Advisor: Dr. Clint Slatton
2000 – 2004	**Bachelor of Engineering;** Electronics and Communication Engineering, Bharathiar University, India.

Publications

Srinivasan S, Laback B, Majdak P & Arnoldner C (2020), Improving Interaural Time Difference Sensitivity using Short Inter-pulse Intervals with Amplitude-Modulated Pulse Trains in Bilateral Cochlear Implants. *Journal of the Association for Research in Otolaryngology* 21(1):105-20.

Lindenbeck M, Laback B, Majdak P & **Srinivasan S** (2020), Temporal-pitch sensitivity in electric hearing with amplitude modulation and short inter-pulse intervals. *The Journal of the Acoustical Society of America* 147(2):777-93.

Srinivasan S, Laback B, Majdak P & Delgutte B (2018), Introducing Short Interpulse Intervals in High-Rate Pulse Trains Enhances Binaural Timing Sensitivity in Electric Hearing. *Journal of the Association for Research in Otolaryngology* 19(3), 301-315.

Srinivasan S, Keil A, Stratis K, Osborne A, Cerwonka C, Wong J, Rieger B, Polcz V & Smith DW (2014), Interaural attention modulates outer hair cell function. *European Journal of Neuroscience* 40(12), 3785-92.

Srinivasan S, Keil A, Stratis K, Woodruff Carr KL & Smith DW (2012), Effects of cross-modal selective attention on the sensory periphery: cochlear sensitivity is altered by selective attention. *Neuroscience* 223, 325–32.

Hermer-Vazquez R, Hermer-Vazquez L & **Srinivasan S** (2009), A putatively novel form of spontaneous coordination in neural activity. *Brain Research Bulletin* 79(1), 6–14.

Hermer-Vazquez R, Hermer-Vazquez L, **Srinivasan S** & Chapin JK (2007), Beta- and gamma- frequency coupling between olfactory and motor brain regions prior to skilled, olfactory-driven reaching. *Experimental Brain Research* 180 (2), 217–235.

Grants and Funding

PhonoWork: Phonemic processing and working memory interactions in electric hearing (Submitted to Fonds zur Förderung der wissenschaftlichen Forschung (FWF), 2020, unsuccessful, resubmitted with revisions 2020, under revision)

Phonemic processing, production and working memory interactions in normal and electric hearing (Submitted to Wiener Wissenschafts Forschungs und Technologiefonds (WWTF) 2018, unsuccessful in first round due to number of qualified applicants)

NeurITD: Objective measures of spatial hearing in normal and electric hearing using EEG (In progress)

Conference Proceedings

Srinivasan S & Majdak P (2019), On phonemic processing and working memory in electric hearing, *Fifth International Conference on Cognitive Hearing Science for Communication*, Linköping Sweden (Selected for oral presentation)

Laback B, **Srinivasan S**, Lindenbeck M, Ferber M & Majdak P (2018), Towards Increasing Timing Sensitivity in Electric Hearing, *Acoustical Society of America,* Boston MA.

Lindenbeck M, Laback B, **Srinivasan S** & Majdak P (2018), Enhancing Rate Pitch Sensitivity in Electric Hearing by Inserting extra pulses with Short Inter-pulse Intervals, *German Society for Audiology*, Halle, Germany.

Srinivasan S, Laback B & Majdak P (2017), Improving Interaural Time Difference Sensitivity using Short Interpulse Intervals with vowel-like stimuli in Bilateral Cochlear Implants, *Acoustical Society of America*, Boston MA.

Srinivasan S (2017), Interaural Time Difference and contribution of the MSO in Cochlear Implants, *Workshop on Cognitive Neuroscience of Auditory and Cross-modal perception*, Kosice Slovakia

Srinivasan S, Laback B & Majdak P (2017), Introducing Short Interpulse Intervals improves Behavioral ITD Sensitivity with Cochlear Implants, *Deutsche Jahrestagung für Akustik*, Kiel Germany.

Laback B & **Srinivasan S** (2016), Modeling Effects of the Medial Olivocochlear Reflex on Interaural Level Differences, *Deutsche Jahrestagung für Akustik*, Aachen Germany.

Srinivasan S, Laback B & Majdak P (2016), Short Inter-Pulse Intervals improve Behavioral ITD Sensitivity in Bilateral Cochlear Implants, *39th Annual Midwinter Meeting of the Association for Research in Otolaryngology*, San Diego CA.

Srinivasan S & Laback B (2015), Effects of efferents on neural SNR and spatial hearing: Implications for CIs, *Closing the Auditory Loop Symposium*, Hannover Germany.

Srinivasan S, Laback B & Majdak P (2015), Effects of Introducing Short Inter-Pulse Intervals on Behavioral ITD Sensitivity with Bilateral Cochlear Implants, *Conference on Implantable Auditory Prostheses*, Lake Tahoe CA (Selected for oral presentation).

Srinivasan S, Spankovich C, Keil A, Cerwonka C, Stratis K, Osborne FA & Smith DW (2013), Selective auditory attention modulates peripheral cochlear responses through suppression of unattended signals. *Society for Neuroscience*, San Diego CA.

Srinivasan S, Keil A, Stratis K, Osborne FA, Cerwonka C, Wong J, Rieger BL & Smith DW (2013), Intramodal selective attention modulates peripheral auditory function. *Society for Neuroscience*, North Florida Chapter.

Srinivasan S, Stratis K, Woodruff-Carr KL, Keil A & Smith DW (2012), Attentional effects on peripheral auditory function in response to monaural and binaural stimuli. *Society for Neuroscience*, North Florida Chapter.

Srinivasan S, Fooden A & Hermer-Vazquez L (2009), Patterns of information flow in a sensory-guided symmetrically-rewarded decision task. *Society for Neuroscience*, Chicago IL.

Srinivasan S, Fooden A & Hermer-Vazquez L (2008), Do patterns of sensorimotor information flow generalize across decision tasks? *Society for Neuroscience*, Washington DC.

Research Experience

03/2020 – 06/2021	Objective measures of spatial hearing in normal and electric hearing – Designed and piloted a signal paradigm to probe ITD representation at cortical and subcortical levels using scalp EEG in normal and electric hearing – Designed experimental paradigm to measure neural correlates of roving and switching ITD tracking
04/2018 – 08/2020	Phonemic processing and working memory interactions in normal and electric hearing – Designed and piloted an experimental paradigm with behavioral and EEG components to probe identification and working memory precision of vowel sounds – Implemented multidimensional scaling analyses to determine vowel sound fidelity changes with increasing working memory load
03/2015 – 09/2018	Improving interaural time difference (ITD) sensitivity in bilateral cochlear implant (CI) listeners – Investigated bilateral electrical stimulation methods to improve ITD sensitivity in CI listeners – Developed and conducted psychophysical experiments with CI listeners – Analyzed psychophysical data with customized MATLAB routines
01/2011 – 06/2014	Effects of selective attention on peripheral auditory function – Investigated discrete and fine structure distortion product otoacoustic emissions (DPOAE) in quiet and contralateral noise in humans engaged in selective attention – Developed selective attention experiments using auditory brainstem response (ABR) measures in humans – Explored effects of selective attention on DPOAE I/O functions – Analyzed discrete and fine structure DPOAE and ABR data with customized MATLAB routines
09/2007 – 04/2011	Information flow between sensory and motor cortices in a decision-making task: Dr. Linda Hermer-Vazquez – Investigated information flow between primary motor and olfactory cortices in rats in an olfactory discrimination task – Analyzed AP data using spike synchronization algorithms with MATLAB – Analyzed LFP data using Granger causality techniques with MATLAB
05/2005 – 05/2007	Human Motor Performance Laboratory, College of Public Health and Health Professions, University of Florida – Developed graphical user interfaces for gait performance analysis in hemiparetic gait patients
05/2005 – 05/2006	Surface morphology analysis using LIDAR and other elevation datasets: Dr. K. Clint Slatton – Analyzed surface water runoff using hydrological models based on terrain LIDAR data with MATLAB

Fellowships

2012	International Student Summer Scholarship, Psychology, University of Florida
2008	Mcknight Brain Institute Graduate Student Holiday Award
2007 – 2010	Grinter Fellowship Award, College of Liberal Arts and Sciences, University of Florida

Research Skills

- Statistical Packages & Programming: MATLAB, Python, R, SPSS
- Experimental Environments: OpenSesame, Presentation, PsychoPy, PsychToolBox
- Speech & textual analysis: Perl, Praat

Teaching Experience

Graduate Instructor: University of Florida

Spring 2013	PSB 3002; Introduction to Physiological Psychology

Teaching Assistant: University of Florida

Fall 2012	PSB 3002; Introduction to Physiological Psychology
Spring 2012	PSY 2012; General Psychology
Fall 2011	PSB 3002; Introduction to Physiological Psychology
Spring 2011	PSB 3002; Introduction to Physiological Psychology
Fall 2010	PSB 4342; Introduction to Cognitive Neuroscience
Spring 2010	PSB 3002; Introduction to Physiological Psychology
Fall 2009	PSB 3004; Introduction to Physiological Psychology
Spring 2009	PSY 3213L; Laboratory methods in Psychology
Fall 2008	PSB 4342; Introduction to Cognitive Neuroscience
Spring 2008	PSB 3340: Behavioral Neuroscience
Fall 2007	PSB 3004: Introduction to Physiological Psychology

Membership in Academic Societies

- Association for Research in Otolaryngology
- American Physiological Society
- Society for Neuroscience

Language Skills

- Tamil: Native
- English: Near-native fluency
- Hindi: Near-native fluency
- Sanskrit: Reading/Writing
- Bangla: Reading
- German: B1/B2