

# Meghavarshini KRISHNASWAMY (MEGH)

## PERSONAL DATA

---

MAILING ADDRESS: Department of Linguistics, Communication Bldg. Room 109,  
Tucson, Arizona-85721

EMAIL: [mkrishnaswamy@email.arizona.edu](mailto:mkrishnaswamy@email.arizona.edu)

## WORK EXPERIENCE

---

AUGUST 2019 -  
Present

Graduate Assistant at DEPARTMENT OF LINGUISTS, UNIVERSITY  
OF ARIZONA

- Research Assistant, ASIST-ToMCAT project (Summer 2020-present)
- Research Assistant, Douglass Phonetics Lab (Spring and Fall, 2020)
- Teaching Assistant and grader for LING 150 "Language in the World" (Fall 2019)

OCTOBER 2017 -  
July 2019

Research Associate at SPEECH AND LANGUAGE PROCESSING  
LABORATORY, EFL UNIVERSITY, Hyderabad  
*DST-CSIR Project "Influence of Coarticulation on Lexical  
Access"*

- Designed the protocol and visual prompts for an Ultrasound study to analyse the effects of coarticulatory resistance and lingual adjustments on voiced geminates in Bengali.
- Conducted pilot Ultrasound studies on intervocalic voiceless geminate stops in Malayalam.
- Compiled text corpora of target words and distractors for a series of acoustic, Ultrasound, and Visual World studies to analyse intervocalic geminates in Malayalam.
- Compiled a text corpus of monosyllabic Hindi words for a joint EMA study with Potsdam University, under Dr. Adamantios Gafus.
- Recorded and annotated a corpus of Mongolian words for a controlled acoustic study on vowel harmony. Currently working on formant analysis of the data.
- Synthesised audio stimuli for related Visual World studies, using cross-splicing and manipulating acoustic features such as formants, duration and pitch.
- Currently working on a protocol for training RNNs for automatic recognition of retroflex stops in Ultrasound images.

## WORK EXPERIENCE

|                          |   |
|--------------------------|---|
| MAY 2015 -<br>April 2017 | <p>Fellow at TEACH FOR INDIA, Hyderabad</p> <p>Class Teacher, Grade 6, Grace Model School, Hyderabad (a low-income private school)</p> <ul style="list-style-type: none"><li>• Taught English and Science in a Grade 6 classroom, and Environmental Sciences in a Grade 5 classroom as a full-time teacher.</li><li>• Underwent rigorous teacher-training programs for classroom management, curriculum development, subject-matter expertise and syllabus design.</li><li>• Raised approximately 82,000 INR through a crowdfunding campaign to set up a digital classroom, class library and fund a sports training program as part of the fellowship. (<a href="https://www.ketto.org/fundraiser/mindswithoutfear">https://www.ketto.org/fundraiser/mindswithoutfear</a>)</li></ul> |
|--------------------------|---|

## EDUCATION

|            |   |
|------------|---|
| MAY 2021   | M.S., HUMAN LANGUAGE TECHNOLOGY, <b>University of Arizona</b>                       |
| APRIL 2015 | M.A., LINGUISTICS, <b>The English and Foreign Languages University</b> , Hyderabad  |
| APRIL 2013 | B.A. (Hons), ENGLISH, <b>Lady Shri Ram College, The University of Delhi</b> , Delhi |

## CONFERENCES AND PUBLICATIONS

John Culnan, Seongjin Park, Meghavarshini Krishnaswamy, and Rebecca Sharp. Me, myself, and ire: Effects of automatic transcription quality on emotion, sarcasm, and personality detection. In *Proceedings of the Eleventh Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis*, pages 250–256, 2021.

Meghavarshini Krishnaswamy, Indranil Dutta, and Maumita Bhaumik. Alveolar stops exhibit greater coarticulatory resistance than retroflexes and dentals in Malayalam. *The Journal of the Acoustical Society of America*, 148(4):2582–2582, 2020.

Indranil Dutta, Charles Redmon, Meghavarshini Krishnaswamy, Sarath Chandran, and Nayana Raj. [Articulatory complexity and lexical contrast density in models of coronal coarticulation in Malayalam](#). In *Proceedings of the 19th International Congress of Phonetic Sciences*, 2019.

Meghavarshini Krishnaswamy, Indranil Dutta, and Ushasi Banerjee. [Active cavity expansion through lingual adjustments to place of constriction in voiced geminates](#). In *Proceedings of Meetings on Acoustics 175ASA*, volume 33, page 060002. Acoustical Society of America, 2018.

Ushasi Banerjee, Indranil Dutta, and Meghavarshini Krishnaswamy. Evidence for active cavity expansion through advanced lingual place of constriction in voiced geminates. *The Journal of the Acoustical Society of America*, 143(3):1754–1754, 2018.

## ACTIVE PROJECTS AND FUTURE PAPERS

|               |   |
|---------------|---|
| JANUARY 2019  | A Visual World study of lexical access in voiceless Malayalam stops   |
| JANUARY 2019  | Modelling voiceless retroflex stops from Ultrasound images using RNNs   |
| DECEMBER 2018 | “Sparse lexical representation coerces coarticulatory resistance: Ultrasound evidence from Malayalam coronal geminates” |

## INTERNSHIPS

---

MAY 2016 -  
JUNE 2016

Research Associate at KARADI PATH EDUCATION COMPANY, Chennai

Worked on session plans and teacher-aids for *Magic Hindi*, a classroom for Hindi language teaching for non-native speakers in secondary classrooms.

- Was responsible for editing the Hindi translation to make it more accessible, engaging and contemporary, and assisted in copyediting the book of Hindi rhymes that was to accompany the product.
- Edited the English versions of existing session plans, designed session plans for the teachers' handbook, based on the new stories and poems to be included in the curriculum that year.
- helped perform quality checks on the first and second draft of the product.

## LANGUAGES

---

ENGLISH: Fluent

HINDI: Native Speaker

TAMIL: Mother Tongue

GERMAN Certificate of Proficiency from EFL University, Hyderabad

SANSKRIT School Certificate (grade 10), Central Board of Secondary Education, India

## COMPUTER AND TECHNOLOGY SKILLS

---

Basic Knowledge: Praat Scripting, Command Line, Emacs, Regex, Scala, C, Scikit Learn, SQL

Intermediate Knowledge: R, PYTHON, Praat, HTML,  $\text{\LaTeX}$

## INTERESTS AND ACTIVITIES

---

Open-Source Technology, Programming, Education, Design Thinking

Laboratory Phonetics, Natural Language Generation

Tabletop Gaming, Yarn Art, Fitness