

Sneha Ray Barman

 Sneha Ray Barman |  raybarmansneha2@gmail.com |  sneha.barman@iitg.ac.in

EDUCATION

PhD Computational Linguistics

Jan 2022 - present

Indian Institute of Technology Guwahati, India

Supervisors: Prof. Shakuntala Mahanta and Dr. Neeraj Kumar Sharma

M.A. Linguistics

2019 - 2021

The English and Foreign Languages University, Hyderabad

Dissertation: Call me by whose name?: A study of queer linguistics in India

Supervisor: Dr. Anish Koshy

B.A. English (honors)

2016-2019

University of Calcutta

AWARDS AND HONORS

IIT Institute Fellowship

2022-present

Awarding body: IIT Guwahati for the tenure of PhD

Qualified UGC National Eligibility Test (NET) in Linguistics

Dec 2020

Awarding body: University Grant Commision, Govt. of India

Umarani Mukherjee Memorial Prize

2019

Awarding body: Gurudas College for scoring the highest marks in undergraduate Honors examination

TEACHING EXPERIENCE

DA 108: Python Programing

Feb-May 2024

Content and assessment designing for online degree program Data Science and AI offered by IIT Guwahati on Coursera

PEER-REVIEWED CONFERENCE PRESENTATIONS

[upcoming] **Ray Barman, S.**, Mahanta, S., Sharma, N.K. (2024). Deciphering Assamese Vowel Harmony with Featural InfoWaveGAN. Poster presentation at the Session 'Innovative Methods in Phonetics and Phonology', Interspeech 2024, September 1-5, 2024.

Ray Barman, S., Mahanta, S., Sharma, N.K. (2024). Unsupervised modeling of vowel harmony using WaveGAN. Poster presented at Speech Prosody, Leiden University, Leiden, July 1-6, 2024. [\[poster\]](#)

Ray Barman, S., Mahanta, S., Sharma, N.K. (2024). Modeling regressive vowel harmony from continuous speech stream. Oral presentation at Society for Computation in Linguistics, University of California, Irvine, June 27-29, 2024. [\[slides\]](#)

Ray Barman, S., Mahanta, S., Sharma, N.K. (2024). Modeling unsupervised learning of regressive vowel harmony with GAN: A view from Assamese. Poster presented at Laboratory Phonology 19, Hanyang University, Seoul, June 27-29, 2024. [\[poster\]](#)

Ray Barman, S. (2023). Examining learnability of OT grammar: A view from Kashmiri Loanwords. Poster presented at ConSOLE XXXI, Bielefeld University, Germany, February 22-24. [\[poster\]](#)

Ray Barman, S. (2022). Queering India: A sociolinguistic study of transphobic and homophobic slang in colloquial tongue. Abstract accepted for poster presentation at the Sociolinguistic Symposium 24, July 13-16.

Ray Barman, S. (2021). WhatsApp Emojis: A precarious affair. Abstract accepted for oral presentation at 45th Annual Conference of the Semiotic Society of America, virtual, October 20-23.

PEER-REVIEWED CONFERENCE PROCEEDINGS

[to appear] **Ray Barman, S.**, Mahanta, S., Sharma, N.K. (2024). Deciphering Assamese Vowel Harmony with Featural InfoWaveGAN. In Proceedings of Interspeech 2024.

Ray Barman, S., Mahanta, S., Sharma, N.K. (2024). Unsupervised modeling of vowel harmony using WaveGAN. In Proceedings of Speech Prosody 2024, 200-204. doi:[10.21437/SpeechProsody.2024-41](https://doi.org/10.21437/SpeechProsody.2024-41). [\[paper\]](#)

Ray Barman, S., Mahanta, S., Sharma, N.K. (2024). Modeling unsupervised learning of regressive vowel harmony with GAN: A view from Assamese. Proceedings of the 19th Conference on Laboratory Phonology (Eds. T. Cho, S. Kim, J. Holliday and S. Lee-Kim), 217-218. [\[published abstract\]](#) [\[full proceeding\]](#)

Ray Barman, S. (2024). Examining learnability of OT grammar: A view from Kashmiri Loanwords. Kovač, Iva, Paul Meisenbichler, Atefeh Shahbazi, Hadis Tamleh and Maximilian Wiesner, ed. *ConSOLE XXXI: Proceedings of the 31st Conference of the Student Organization of Linguistics in Europe*, 237-251. Leiden: Leiden University Centre for Linguistics. [\[Paper\]](#)

MEMBERSHIP

Linguistic Society of America *Jan 2023- present*

Association for Laboratory Phonology *April 2024-April 2026*

ISCA *Jun 2024 - Jun 2025*

SKILLS

Technical: C, Python, R, SPSS, L^AT_EX, Praat, MBROLA, Git, Machine learning

Languages: Bangla(fluent), English(fluent), Hindi(fluent), French(basic), mandarin Chinese(basic)

OUTREACH

Akshar (student initiative of EFLU Hyderabad)

Aug 2019-Feb 2020

student coordinator, teacher

- Organized weekly classes for economically backward children and taught dropped-out students English, Maths, and General knowledge.
- Helped them get back to school after the COVID-19 pandemic.