



## AN INTRODUCTION TO COMPUTATIONAL LINGUISTICS

Organized by the Department of Linguistics  
Assam University, Silchar

### Registration form link:

[https://docs.google.com/forms/d/e/1FAIpQLSdGk2AD5jTKoacOmuTkmEvje879hd5Y3Rz-h9eaTHnrI8c7ow/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdGk2AD5jTKoacOmuTkmEvje879hd5Y3Rz-h9eaTHnrI8c7ow/viewform?usp=sf_link)

### Talk 3: Prof. Indranil Dutta

School of Languages and Linguistics, Jadavpur University

Title: Grammar induction in artificial neural networks:

How machines learn what we already know.



### Abstract:

One of the most remarkable abilities that humans exhibit is our ability to form generalizations and uncover patterns in variable data. We go from processing low-level variation to assigning immutable categorization. The last two-decades have seen immense growth in our ability to process large amounts of data which has naturally led to development of speech technologies, hitherto unseen in form and function. One of the major questions, however, that remains to be answered: Do humans and machines learn the same things? Is \*grammaticalization\* and \*phonologization\* an optimal solution to a 'dealing with variation' problem? In this talk, we will shed light upon some of the recent research in computational linguistics, especially speech processing, which investigates this very idea. We will look into research within my lab that seeks to understand how vowel harmony systems come about and how artificial neural networks inductively learn from low-level acoustic variation.

### Co-ordinators:



Prof. Kh. Dhiren Singha



Dr. Monali Longmailai

June 17, 2021 at 1:00pm IST

Google Meet Link:

<https://meet.google.com/gfo-hvxw-awd>