Neural encoding and decoding of human speech

Abstract

The human brain possesses a remarkable capacity to encode and decode the multifaceted aspects of speech, from the subtle details of acoustic characteristics to meanings of words, sentences and paragraphs. Yet, our understanding of how the brain represents these acoustic and semantic aspects, especially in a multi-talker scenario, remains limited.

In this talk, I will first present an EEG study that examines the neural encoding of both the acoustic attributes and the semantic contents of words, sentences and paragraphs under both single-talker and multi-talker situations. I will then outline current approaches to decode neural signals from human brains back into speech, and present some of our ongoing work in this direction.

Speaker

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Details

- 2024-March-01 (Fri)
- 15:00 - 17:00 (HKT)
- Hybrid - 4409, Floor 4, Li Dak Sum Yip Yio Chin Academic Building

To join, please visit:
https://cityu.zoom.us/j/99687662924

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