

7th INTERNATIONAL CONFERENCE ON Language & Technology

19TH - 21ST FEB, 2020

www.cle.org.pk/clt20

Urdu Prosody

Description

The prosodic system of Urdu is composed of pitch accents and boundary tones. There are three basic pitch accents; low (L*), high (H*) and rising (L*+H). The boundary tones relate to the two prosodic phrases above the word level; the accentual phrase (AP) and the intonational phrase (IP). IP is organized in a series of APs. The motivation for the AP comes from the fact that the distribution of high tones is not always over the lexical words. These tones distribute over a prosodic constituent which is larger than a prosodic word.

Though tone is considered one of the most prominent cues for determining boundaries within phrases yet there are some other non-tonal cues which can hint the presence of phrases. These cues include pauses and phrase-final lengthening of segments.

Aims and Learning Outcome

The participants/audience will learn the following:

- Hierarchy of prosodic phrases in non-focused context
- Typology of pitch accents in Urdu
- Annotation of speech corpus at break index and tone levels

Outline

- | | |
|--|--------|
| 1. Introduction to Phonology of Intonation | 60 min |
| 2. Identification of Pitch accents in Urdu and their annotation | 45 min |
| 3. Identification of prosodic phrases in Urdu and their annotation | 45 min |
| 4. Break Indices in Urdu and their annotation | 30 min |

Profile of the Presenter

Dr. Sarmad Hussain did his doctoral degree in Speech Science from Northwestern University, USA in 1997, with a thesis on Urdu phonetics and phonology. He also worked at Oxford University Phonetics Lab during his doctoral program, working on phonological aspects of stress in Urdu. He had completed his M.Phil. in Computer Speech and Language Processing from Cambridge University, UK, in 1993 where he worked on Urdu text to speech system and a BS in

Electrical Engineering (with specialization in Computer Engineering) from University of Texas, Austin, USA, in 1992. Dr. Sarmad Hussain is currently a professor of Computer Science and heads the Center for Language Engineering at Al-Khwarizmi Institute of Computer Science, University of Engineering and Technology, Lahore. Before UET, he was heading the Computer Science Department at FAST National University, Lahore, where he was also the founding head of Center for Research in Urdu Language Processing. His research is focused on developing computing solutions for Pakistani languages, including research in linguistics, localization, language computing standards, speech processing and computational linguistics. He has been serving on many national and international committees. Some of his current international memberships included Security and Stability Advisor Committee of ICANN, Executive Committee of Asian Federation of Natural Language Processing, and Pakistan representative on the International Committee for the Co-ordination and Standardization of Speech Databases and Assessment Techniques. At national level, he currently serves on IDN ccTLD committee of Ministry of IT, National Standards Committee of National Language Authority and is the Chairperson of Society of Natural Language Processing of Pakistan. He has been awarded by Pakistan Science Academy for his work on Pakistani Languages.

<http://www.cle.org.pk/information/people/drsarmadhussain.html>