



**Morphology Based Language
Modelling with Application
to Automatic Speech
Recognition in Telugu**

Dr. Nara Kalyani



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Morphology Based Language Modelling with Application to Automatic Speech Recognition In Telugu

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Dr. N. Kalyani Professor in Department of CSE, G. Narayanamma Institute of Technology and Science, Hyderabad. She completed B.Tech from Vasavi College of Engineering, M.Tech and PhD from JNTUH Hyderabad. She has rich Teaching and Research experience of 23 years and 5 years of experience in Industry. She is author of 5 text books and published nearly 40 plus papers in reputed international and national journals and conferences. She is the recipient of various awards from technical bodies, industry and college management. She is the PI for two DST projects worth of Rs 50L and offered consultancy services to companies like Serveen Software Solutions Pvt Ltd, PS Engineers and Globarena Private Lts. She has professional membership for technical chapters like IET, CSI, AIMERS etc.

ABOUT THE BOOK

"Morphology Based Language Modelling with Application to Automatic Speech Recognition (ASR) in Telugu" delves into the complex realm of creating intuitive speech interfaces for systems, focusing on the Telugu language. The book underscores the natural essence of oral communication, highlighting the challenges of practical speech recognition, especially for Indian languages. It introduces an innovative approach through a morphological study of Telugu, utilizing an unsupervised stemmer for generating words from a limited corpus. Prioritizing the syllable as the recognition unit, the research not only aims to build an efficient ASR model but also emphasizes quick recognition and adaptability, showcased by the use of the Trie data structure to optimize search times and enable seamless vocabulary expansion without exhaustive system retraining.



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