

Cambridge NLE - Special Issue

Natural Language Processing Applications for Low-Resource Languages

We welcome submissions to the special issue of the Cambridge University Press journal [Natural Language Engineering](#) on Natural Language Processing Application on Low-Resource Languages.

The deadline for submissions is November 30, 2022.

Motivation:

Natural Language Processing (NLP) has emerged as one of the decisive expertise across various industrial, cultural and academic domains. Many successful NLP applications have been developed, such as machine translation, information retrieval, text summarization, chatbot, caption generation, and so on. Technologies based on NLP are becoming increasingly widespread. For example, phones and handheld computers support predictive text and handwriting recognition; web search engines give access to information locked up in unstructured text; machine translation allows us to retrieve texts written in English and read them in Hindi. Language processing has become a major role in the multilingual information society by offering more natural human-machine interactions and more sophisticated access to stored information. Prior to the internet, most machine-readable data was stored in structured databases and retrieved using specialized query languages like structured query language. In today's world, most data is found in unstructured or semi-structured natural language texts, speech, and images. There is a growing demand for approaches to 'unlock' this data. Text analytics, sentiment analysis, topic detection, and information extraction are areas where graduates with expertise in natural language processing techniques might find work. The NLP applications for high-resource languages such as English, French, German, Chinese, Spanish, Japanese etc., have achieved state-of-the-art performance in terms of fluency, consistency, and accessibility. Subsequently, NLP applications for low resource languages such Mizo (India), Assamese (India), Dzongkha (Bhutan), Bantu (Africa), Kurdish (Iran, Iraq, and Turkey) etc., are underrepresented due to the unavailability of adequate data. The need to collect and compile materials for the low resource language is of utmost importance because customs, oral traditions, and other inherited knowledge are no longer passed among native speakers when a language dies, jeopardizing the knowledge and ability to understand the civilization who spoke it. NLP resources are required to perform innovative measures to document and describe these languages to reproduce them at lexical, syntactic and semantic level. So the aim of this special issue is to highlight the contribution of Artificial Intelligence-Natural Language Processing applications towards low resource languages.

Call for Papers

We welcome papers dealing with one or more of the following topics:

- *Machine Translation for Low-Resource Languages*
- *Caption Generation for Low-Resource Languages*
- *POS Tagging on Low-Resource Languages*
- *Optical character recognition and generation of Low-Resource Languages.*
- *Chatbot assistant for Low-Resource Languages*
- *Speech/Language recognition*
- *Regional music identification and classification*
- *Textual Entailment of Low-Resource Languages*
- *Face-to-Face Translation of Low-Resource Languages*
- *News/Social media analysis*
- *Text prediction and suggestion*
- *Sentiment analysis*
- *Text classification*

Important Dates

Deadline for submissions: November 30, 2022

First-round author notification: Between March 30, 2023 and April 30, 2023

Submission of revised versions: Between June 30, 2023 and July 30, 2023

Second-round author notification (final): Between August 30, 2023 and September 30, 2023

Camera-ready versions: Between Oct 01, 2023 and Oct 30, 2023

Submissions

Instructions for preparing your manuscript for the *Journal of Natural Language Engineering* are available [here](#).

Please submit your article through the NLE [manuscript submission system](#). When submitting your manuscript, please select *Natural Language Processing Applications for Low-Resource Languages* in the field *Special Issue Designation*.

Guest Editors

Dr. Partha Pakray, National Institute of Technology Silchar

Prof. Alexander Gelbukh, Instituto Politécnico Nacional, Mexico City, Mexico

Prof. Sivaji Bandyopadhyay, National Institute of Technology Silchar