



IIIT-Delhi organized the 19th International Conference on Natural Language Processing (ICON 22)

New Delhi, 23rd December 2022: The nineteenth International Conference on Natural Language Processing (ICON-2022) was held at Indraprastha Institute of Information Technology Delhi (IIIT-Delhi), India, during December 15-18, 2022. The ICON Conference series is a forum for promoting interaction among researchers in the field of Natural Language Processing (NLP) and Computational Linguistics (CL) in India and abroad.

The event engaged key stakeholders in a vital global community conversation about what lies ahead in the field of Natural Language Processing (NLP). It witnessed higher participation, reverberating enthusiasm, and engagement amongst researchers from academia and industry alike, resulting in greater standardization and seamless cross-technology development. The conference will reinforce momentum across various NLP research initiatives, especially across Indian languages. This was also evident in the submissions received as part of ICON-2022, which pertained to knowledge integration, code-mixing, semantic structure, and sentiment analysis within unsupervised and meta-learning frameworks. Consequently, the increased accessibility and development of several linguistic resources and rich corpora for Indian languages will encourage contemplating language-agnostic NLP tools and capabilities. Through such collaborative efforts, it is apt to envision technological advancements that will cater not only to the Indian NLP arena but to the whole world.

A total of 1,500+ people participated in the conference both virtually and in-person, ICON 2022 featured multiple events including panel discussions, paper presentations, and keynote lectures. The impressive array of speakers invited included Prof. Tim Baldwin, MBZUAI, University of Melbourne, President - ACL, Prof. Maria Liakata, Queen Mary School of London, Turing AI Fellow, Prof. Pascale Fung, Hong Kong University of Science & Technology, among others. There were 15+ workshops and tutorials on the topics like Multimodal Machine Learning in Low-resource Languages, Natural Language Processing in Agriculture and Livestock Management, Advances in NLP Research for Automated Business Intelligence, and Social Bias Detection and Mitigation in Text, to name a few. The conference was also adorned with various startups and industry partners' august presence as part of the "Industry Connect", enabling a productive ecosystem for fostering a broader connection among researchers and startup enthusiasts.

Some noteworthy quotes from ICON-2022's eminent guests:

Prof. Tim Baldwin: *"It is amazing to see a cross-section of NLP work taking place in India at the moment, particularly in multilinguality and code-switching, in both academia and Industry."*

Prof. Maria Liakata: *"Many temporally-sensitive NLP tasks leveraging human behavior evolution are under-explored. Our research focuses on personalized longitudinal NLP, which solicits heterogeneous and multimodal temporality assessment. This addresses challenges pertaining to small data, cross-domain transfer, and improving computer-human interaction."*

Samsung R&D: *"For voice-based technology leveraging NLU, our latest offering is Bixi, a superior voice assistant-based alternative to Alexa. With such cutting-edge innovative solutions, we consistently aim to adapt to our consumers' dynamic needs and constantly strive to enable a seamless experience for them."*

TRINKA: *"Trinka is a complete writing assistant designed to help clients create formal, concise, and engaging writing. Powered by our patented AI technology, Trinka employs innovative ML/DL models trained in over 1300 subject areas, including medical, life sciences, physical sciences, engineering, etc., and NLP technologies.*

Closing remarks by the Organizing Chair: **Dr. Md. Shad Akhtar**, Organizing Chair, ICON-2022, Faculty Member at IIIT-Delhi:

"ICON is a yearly flagship conference of the NLP Association of India (NPAI), which aims to bring NLP researchers to one platform to discuss and showcase recent advancements within the field. Towards promoting and encouraging research that caters to the rich linguistic diversity of Indian languages, ICON has been hosted in different regions of India -- last year, it was held in Silchar, the northeastern part of the country. This year ICON moved to the north, and we, at IIIT Delhi hosted ICON's 19th edition. It was an honor for us to host two eminent NLP researchers from Abu Dhabi and England, to deliver an in-person keynote talk, while one of the keynotes was delivered remotely. Moreover, we had an exciting panel discussion on the dominance of Transformer -- unarguably the most popular and fundamental concept in recent AI-based research, over classical NLP.