

Special Issue

Innovative Applications of Large Language Models in Natural Language Processing (NLP)

Message from the Guest Editors

This Special Issue will showcase advances in NLP and its applications, including significant advances in sentiment analysis, machine translation, semantic understanding, and more. The rapid growth of big data and the advancements in computational power have spurred remarkable progress in the field of natural language processing (NLP). Central to this progress are large language models (LLMs) like GPT, BERT, and T5, which have shown exceptional capabilities in understanding and generating human-like text. These models, a subset of artificial intelligence (AI), leverage deep learning techniques to build predictive models that can handle diverse NLP tasks. However, despite their impressive performance, challenges remain in the interpretability, scalability, and ethical implications of these models. In this Special Issue, Research areas may include (but are not limited to) the following:

- Large language models (LLMs)—capabilities, limitations, dangers, and evaluation;
- Knowledge-based, deep learning-based, and neuro-symbolic approaches to text processing;
- Information extraction;
- Information retrieval;
- Semantic analysis;
- Natural language processing;

Guest Editors

Dr. Bo Xu

Dr. Ling Luo

Dr. Liang Yang

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Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

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