

Special Issue

Natural Language Processing and Semantic Technologies: From Theories to Applications

Message from the Guest Editors

The recent advances in large language models have greatly expanded the capabilities of NLP, enabling nuanced understandings and the creation of human-like text. At the same time, the use of semantic technologies, especially knowledge graphs and embeddings, has enriched our contextual understanding by encoding complex relationships between the entities. Together, these technologies can simplify our access to information. This Special Issue focuses on the synergistic fusion of large language models and semantic technologies, exploring how their integration improves the natural language processing (NLP) and data accessibility landscapes. The contributors may explore the collaborative potential of these technologies, addressing how semantic structures improve the context awareness of language models and knowledge representation. This Special Issue aims to shed light on novel methods, applications, and interdisciplinary approaches that leverage the combined strengths of large language models and semantic technologies to push the boundaries of intelligent natural language processing systems.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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