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# Applications, Challenges and Future Direction of Natural Language Processing Based on Deep Learning

Guest Editor:

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### **Message from the Guest Editor**

NLP is a crucial area of Artificial Intelligence that enables machines to process, understand, and generate human languages.

We encourage submissions dealing with text classification, sentiment analysis, authorship attribution, text document clustering, detection of fake news, machine translation, text summarization, development of chatbots, grammar checking, and interdisciplinary NLP studies. However, we do not limit the examples to these and welcome other innovative NLP applications.

We look forward to receiving your contributions and to shaping the future of NLP together.

Natural language understanding and generation

Machine translation

Question answering and dialogue systems

Knowledge extraction and modelling

Knowledge-graph-based approaches

Text summarization and style transfer

Text classification, topic extraction, and discourse analysis Fake news. misinformation, and disinformation detection

Echo chamber and polarization detection

Sentiment analysis, emotion recognition, and stance detection

Document analysis, information extraction, and text mining Behavior modeling

Social and psychological applications of NLP

Multilanguage approaches

Transfer learning in NLP



Specialsue







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## **Message from the Editor-in-Chief**

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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