

Workshop on  
15th Natural Language Processing and Ontology Engineering  
(NLPOE2022)

In conjunction with

The 2022 IEEE/WIC/ACM International Joint Conference on Web Intelligence and  
Intelligent Agent Technology (WI-IAT2022) 17-20 November 2022, Niagara Falls,  
Canada

**•Call for Papers**

Natural Language Processing (NLP) addresses the problems of automated understanding and generation of natural human languages. The former identifies the syntactic structure of a sentence, judges the semantic relations among the syntactic constituents, in hopes of reaching at an eventual understanding of the sentence. The latter process constructs the semantic structures and syntactic constituents according to the semantic and syntactic properties of the lexical items selected, and eventually generates grammatically well-formed sentences. The goal of the NLP applications is to facilitate human-machine communication using natural languages. In particular, it is to establish various computer application software systems to process natural language, such as machine translation, computer-assisted teaching, information retrieval, automatic text categorization, automatic summarization, speech recognition and synthesis, information extraction from the text, intelligent search on the Internet. Today, with the wide use of the Internet, the demand for language information puts a high premium on automated processing of massive language information.

Ontology engineering is a subfield of artificial intelligence and computer science, which aims at a structured representation of terms and relationship between the terms within particular domain, with the purpose to facilitate knowledge sharing and knowledge reuse. Ontology project involves the development of Ontology building programs, Ontology life-cycle management, the research of Ontology building methods, support tools and ontology languages, and a series of similar activities. Ontologies have found important applications in information sharing, system integration, knowledge-based software development and many other issues in software industry.

However, ontology engineering is a time-consuming and painstaking endeavor, and NLP technology has important contributions to make in quick and automatic development of ontologies. This workshop will focus on the recent advances made in Ontology engineering and NLP, with the aim to promote the interaction between and common growth of the two areas. We are particularly interested in the building of upper-level language ontology in NLP and the application of NLP technology in Ontology engineering.

More importantly, we expect that individuals and research institutions in the areas of both Ontology Engineering and NLP could pay attention to this workshop, which may contribute to the integration and growth of these two areas.

The topics of the workshop include, but are not limited to, the following:

Natural language understanding, including syntactic parsing, word sense disambiguation, semantic role labeling etc;

Text mining, including named entity recognition, term recognition, term and synonyms and concept extraction, relation extraction etc;

Lexical resources and corpora, including dictionaries, thesaurus, ontology, etc;

Ontology learning and population from text, Web and other resources;

Application issues of ontology based NLP: information extraction, text categorization, text summarization and other applications;

Other topics of relevance in ontology learning, ontology evolution, ontology modeling and ontology application etc.

#### **·Paper Submission and Publication**

Paper submissions should be limited to a maximum of 8 pages in the IEEE conference proceedings format . Authors do not need to add the copyright line in their file at the footer. IEEE will add it after Camera Ready. Although we accept submissions in the form of PDF, PS, and DOC/RTF files, you are strongly encouraged to generate a PDF version for your paper before submitting it.

All submitted papers will be reviewed by at least 2 program committee members on the basis of technical quality, relevance, significance, and clarity. Accepted papers will be published in the conference workshop proceedings by ACM and indexed by EI.

The workshop only accepts online submissions. Workshops online submission page can be accessed through the submission website of NLPOE 2022.

#### **·Important Dates**

June 1, 2022: Full Papers Submission

July 20, 2022: Paper Acceptance Notification

July 20, 2022: Early Registration Opens

August 7, 2022: Camera-ready Submission

November 17, 2022: Workshops and Special Sessions

November 18-20, 2022: Main Conference

#### **·Program Committee**

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Xinying Qiu, Guangdong University of Foreign Studies

Meng Wang, Jiangnan University

Yao Liu, Institute of Scientific and Technical Information of China Likun Qiu,  
Alibaba Inc.

Zuoyan Song, Beijing Normal University

Chengzhi Zhang, Nanjing University of Science and Technology

Meishan Zhang, Singapore University of Technology and Design

Na Tian, Jiangnan University

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