Special Issue

Advances in Ontology and the Semantic Web

Message from the Guest Editors

In the recent years, most of the Artificial Intelligence applications for predictive analysis are based on machine learning and neural network approaches, which rely on models based on an implicit (sub-symbolic) knowledge representation derived from the experience (data-driven). However, many applications for automated reasoning and searching tasks require explicit models based on a human readable (symbolic) representation of rules and properties. In this respect, computational ontologies and the Semantic Web deserve a great interest since they are rooted in formal logic that is at the basis of the representation of symbolic knowledge. This Special Issue aims at presenting methodological and technological advancements, as well as relevant use cases, in the scope of ontologies and the Semantic Web. In particular, high quality contributions are expected in, but not limited to, the areas of: languages for ontology representation; methodologies and tools for ontology engineering; ontology integration; ontology-based reasoning for Explainable AI.

Guest Editors

Dr. Francesco Taglino CNR, Istituto di Analisi dei Sistemi ed Informatica IASI "Antonio Ruberti", Via Taurini 19, I-00185 Rome, Italy

Dr. Anna Formica

CNR, Istituto di Analisi dei Sistemi ed Informatica IASI "Antonio Ruberti", Via Taurini 19, I-00185 Rome, Italy

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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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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