Special Issue Call for Papers

KNOWLEDGE MANAGEMENT FOR LAW

Computer Law & Security Review - Elsevier Journal (IF 2.7)

Legal Informatics represents a multidisciplinary field that is receiving growing attention in terms of both scientific challenges and real applications. **Artificial Intelligence (AI)** is one of the main cornerstones of this development, with novel research methods in the **Knowledge Modeling (KM)** sub-area, also deeply connected with **Information Extraction (IE)** technologies.

Informatics facilitates access to understandability of legal knowledge, including judgments, recommendations, legislation, citizens' constitutional rights, and soft law. For instance, legal ontologies highlight the nature of links between norms; the application of specific algorithms supports semi-automatic interpretation of legal provisions and prediction of judicial decisions.

Digital justice and digital law improve the daily work by speeding up the resolution of legal issues, including support for legal compliance and access to complex and extensive legal knowledge. Likewise, the digitalization of law has a socio-political impact by making legal knowledge accessible to a broader audience of citizens.

Innovative technologies for processing legal documents and AI methods applied to legal issues can support the work of public administrations and private companies in the legal field.

Typical goals and applications include:

i) automatic classification of legal documents,

ii) legal design of ontologies and representation frameworks,

iii) computation of similarity among legal sources of data for clustering or intelligent search mechanisms,

iv) prediction & support in decision-making processes and for supporting legal interpretation,

v) sectoral and transversal studies such as diachronic legal analyses outlining the evolution of legal concepts and definitions over time,

vi) detection of linguistic phenomena and patterns in legal sources,

vii) multilingual alignments of concepts on domestic and international legal sources,

viii) identification of legal references and network analysis,

ix) analogical reasoning and compliance checking, and so forth.

Topics

The Special Issue on **KNOWLEDGE MANAGEMENT FOR LAW** focuses on the wide-ranging topic of AI, KM and IE methods in legal informatics:

- Automated knowledge extraction from legal text corpora and databases
- Natural language processing for legal documents
- Legal ontologies and design, visual law
- Multilingual alignments, retrieval, extraction and analysis of legal sources
- Entity recognition, disambiguation, identification of legal semantic roles
- Link analysis, linked data, and knowledge graphs in the legal domain
- Computational models of argumentation for legal data
- Machine Learning and Deep Learning for legal text
- Information retrieval and multimedia search for legal documents
- Question answering, dialogue and discourse analysis, query understanding
- Legal text summarization and generation
- Ethical or fairness issues and computing in the legal domain
- Applications in legal data and knowledge engineering

Important Dates

Title and Extended Abstract (max 4 pages): **12th December 2022**
Response to authors: 19th December 2022
Full papers due: 20th February 2023
[standard review process]
Final notification: 1st October 2023

Submissions

Send the extended abstract (max 4 pages, in a free format, by 5th December 2022) to the following address: emilio.sulis@unito.it

Review Process

All manuscripts for the Special Issue will be peer-reviewed in a standard **double-blind review process** following the review process of the Journal.
The editors will provide their recommendations and feedback to the authors during each round of revision of the submitted papers.

Instructions for authors

Contributing papers must not be published or currently under review for publication elsewhere; however, they could be extended versions of conference papers provided that the submitted manuscript contains a significant amount of novel contributions as well as differences with respect to the earlier conference paper. Please follows the Guide for Authors

Guest editors

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