

## Preface

The First International Workshop “RELATED - Relations in the Legal Domain” was held in conjunction with ICAIL 2021, São Paulo, Brazil, Virtual Conference, on June 25, 2021.

This workshop focuses on relations in the legal field from different perspectives bringing together several sub-disciplines of AI & Law – ontologies, logic, argumentation and network analysis. The main topics includes: identification of relational patterns in legal documents; relation classification; identification of legal semantic roles and extraction of named entities; detection of networks of implicit and explicit links between norms; modeling legal networks, population, enrichment and alignment of legal ontologies; legal topic modelling and relations between topics; emerging applications in legal data & knowledge engineering.

The challenging task of automatically identifying relations between concepts expressed in textual documents has traditionally been addressed by NLP techniques. Once such relations are identified in the text, they can be formalized to become part of ontological models in a certain legal domain of interest. The extraction of relations between legal concepts and entities is even more pertinent when considering the increasing relevance of knowledge graphs.

Navigating the interplay between legal text fragments beyond terms, such as normative provisions, principles, policies, arguments, is a challenging aspect of legal reasoning. There is a rich theoretical literature on relations between norms, principles and factors. Moreover, recent years have seen important developments in the field of network analysis, particularly the identification, classification and weighting of legal citations in order to build a network of related legal sources and rank their individual importance. Another issue concerns the development of systems for automated identification of implicit relations between norms in terms of, for instance, conceptual similarity, motivation and conflict. Also of relevance to this workshop are topic networks, which can be useful not only for semantic grouping of legal text fragments, but also in comparing different legal documents, such as legislative texts, judgments, national strategy documents, guidelines issued by institutional bodies, and policy documents issued by companies.

The programme of the first edition of the RELATED Workshop included oral presentations of seven papers accepted at the end of a peer-reviewed process, and an invited talk by Bernhard Walzl (Liquid Legal Institute), titled “Networks, Relations, Communities and the question ‘how do we want to continue?’”. We thank all the contributing speakers, the members of our Program Committee for timely providing their reviews despite the difficulties arisen in these times of Covid-19 global emergency, and the ICAIL Program and Conference chairs Adam Zachary Wyner and Juliano Maranhão for their support.

June 2020,

Emilio Sulis, Llio Humphreys, Valentina Leone, Ilaria Angela Amantea

## Workshop Organizers

Emilio SULIS, University of Turin - Computer Science Department (Italy)  
Llio HUMPHREYS, University of Turin - Computer Science Department (Italy)  
Ilaria Angela AMANTEA, University of Bologna - CIRSFID (Italy)  
Valentina LEONE, University of Bologna - CIRSFID (Italy)

## Program Committee

Valerio BASILE (University of Turin, Italy)  
Guido BOELLA (University of Turin, Italy)  
Silvano COLOMBO TOSATTO (CSIRO, Australia)  
Luigi DI CARO (University of Turin, Italy)  
Harshvardhan J. PANDIT (Trinity College, Dublin)  
Rohan NANDA (University of Maastricht, Netherlands)  
Livio ROBALDO (Swansea University, Wales)  
Cristiana SANTOS (Utrecht University, Netherlands)  
Giovanni SIRAGUSA (University of Turin, Italy)  
Andrea TAGARELLI (University of Calabria, Italy)

## Workshop Website

Further information on the topics, schedule, and further developments of the RELATED Workshop can be found at the website: <https://related.di.unito.it/>