

Foreword

This book contains the papers presented at the twelfth JURIX conference, JURIX 1999, held in Leuven, Belgium, on December 10, 1999. Brief descriptions of the demonstrations given on December 9, 1999 are also included. The conference together with the tutorials and the demonstrations were organized by ICRI (Interdisciplinary Centre for Law and Information technology) and INFOSOC (Information Technology and Social Law), both situated at the University of Leuven. The proceedings of JURIX 1999 adequately represent the state-of-the-art research in the domain of Law and Computer Science at the end of this century. The scientific scope runs from legislative drafting and collaborative learning of legal argumentation to the evaluation of legal beliefs and the issue of rule consistency. Sixteen papers have been submitted. With the help of many referees (see the end of this foreword), we were able to offer a final programme of ten papers which meet the high standards JURIX nowadays attempts to maintain.

The contributions

Originally, we tried to sequence the contributions in some logical order, such as: from legislative drafting to managing legal precedents, but we failed. Any other order had also its pros and cons. Therefore, we took the alphabetical order of the first author. Below we provide some background information.

The paper by Bench-Capon and Leng reviews the role that collaborative learning can play in law. They describe how a stand-alone dialogue tool can be embedded in a general environment supporting a variety of aspects of collaborative learning.

Costa, Sousa and Neves show the need for an ontology to make the conversion from text to cases. Moreover, they discuss methods of how to index the cases, and how to retrieve information from cases similar to the one under investigation.

The contribution by Debaene, Van Kuyck and Van Buggenhout focuses on the implementation details of the basic principles of legislative techniques. In particular, it deals with the 254 drafting guidelines of the Flemish government.

In their contribution, Elhag, Breuker and Brouwer discuss the relatively new research domains 'legisprudence' and 'legimatics'. They concentrate on normative conflicts and relate them to the conceptualization of legal knowledge and the methods of representation. Alternative ways for dealing with the problems mentioned are suggested.

A well-balanced theoretical approach of a very difficult problem is given by Jaap Hage in his paper 'Rule Consistency'. He introduces rule logic as a means to handle rules as constraints on possible worlds in which they exist.

The paper by Lodder elaborates on a topic of his recently-published Ph.D. thesis. Taking into account Prakken's layered models of argumentation, he argues that procedural arguments cannot be defined in the logical layer, but should be defined in the procedural layer.

Mommers and Van den Herik propose an evaluation framework for legal information systems. They show how beliefs become knowledge by applying different subsets of knowledge criteria depending on the type of belief. The knowledge criteria are ordered according to a given hierarchy.

Prakken's main topic is how allocations of burden of proof determine the required strength of counterarguments. Nonmonotonic logics and procedural models as a means to model the burden of proof are discussed; however, without any success. Yet, it is shown how dialectical models of defeasible reasoning can be adapted to overcome the problems stated.

A commendable application is described by Stranieri, Yearwood and Zeleznikow. They analyse the reasoning steps a member of the Refugee Review Tribunal in Australia follows in order to infer conclusions regarding the status of an applicant. The authors articulate a heuristic that may generate a plausible document structure without the use of discourse analysis.

Finally, Verheij addresses the question whether it makes sense to speak of a logic of law. First, he arrives at a positive answer; then he starts complicating matters and argues that it can be possible to reduce such a logic to a set of legal premises in a more abstract logic. In a formalization of legal reasoning, a contextual logic approach and an abstract logic approach can lead to different priorities.

Demonstrations

The Programme Committee is pleased that the batch of demonstrations, just as the contributions, is international too. Since we regard the demos as an intrinsic part of the conference – they constitute the actual output part of our research – we have reserved some space for the descriptions of the demonstrations. For an adequate overview of the demos we refer to the table of contents.

Acknowledgements

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