Preface

This volume contains the proceedings of the seventeenth Jurix conference on Legal Knowledge and Information Systems (Jurix 2004), which was held this year on 8-10 December at the Harnack Haus of the Max Planck Society, in Berlin, Germany. This was the third Jurix conference to take place outside of The Netherlands, after London (Jurix 2002) and Leuven (1999).

Fifteen papers are included, down a bit from Jurix 2003, but comparable to most prior Jurix conferences. Despite the move to Germany, almost half of the papers are from The Netherlands. Except for a paper from Canada, the others are from 5 other countries in Western Europe. Thus, the effort to extend Jurix beyond The Netherlands and establish it as the leading European conference on legal knowledge systems is making progress, but there is still some ways to go to fully achieve this aim. Living in Germany, I regret that no papers from German speaking countries are present this year. Let us hope that having held the conference in Berlin will help to revitalize the field of Artificial Intelligence and Law in this part of Europe.

The papers this year focus on the topics of legal knowledge management and information retrieval; legal knowledge acquisition using natural language processing; legal ontologies; case-based reasoning; reasoning about evidence and, last but not least, legal reasoning support.

On the topic of legal knowledge management and information retrieval, two papers are about uses and applications of XML for enriching legislation. Marie-Francine Moens writes about innovative full text retrieval methods making fuller use of the information available in legislative texts when they are annotated in XML. Alexander Boer and his colleagues present an event-based model of version management for legislation that makes use of timestamps encoded using the MetaLex XML schema. The paper by Atefeh Farzindar and Guy Lapalme presents an original method for automatically summarizing court decisions and compares their approach empirically with more generic summarization algorithms.

Three papers are on the topic of legal knowledge acquisition using natural language processing. Ben Hachey and Claire Grover present a method for automatically classifying the "rhetorical status" of sentences in legal texts and validate this method using the corpus of legal decisions of the British House of Lords. Andrea Bolini, Luca Dini, et. al., present a "text mining" method for identifying structures within legislation to support the task of marking up the legislation in XML. Tom van Engers, Ron van Gog and Kamal Sayah present their most recent work on using patterns to "extract" the concepts and rules in legislation, to support knowledge engineers with the task of creating formal models of the legislation.

On the subject of ontologies this year, Joost Breuker and Rinke Hoekstra present a new "core ontology" of legal concepts that they claim is suitable as a foundation for automatically recognizing "responsibility and causal relations" in legal case descriptions. Richard Benjamins, Jesus Contreras, et. al., discuss their case study on the use of a legal ontology in an information system for helping new judges to find relevant documents. In another ontology case-study, Sylvie Despres and Sylvie Szulman show how they developed an application ontology for the concept of "employee" in European legislation, using a core ontology of legal concepts, with the goal of supporting the development of formal models of legislation for use in legal knowledge-based systems.

Two papers are about case-based reasoning this year. Alison Chorley and Trevor Bench-Capon present a method and software for supporting the task of constructing coherent theories of a legal domain from case law. Bram Roth and Bart Verheij, building on the results in Roth's recent dissertation, show how cases can be compared in terms of the dialectical arguments that be constructed from the cases and present a formal definition of dialectical arguments suitable for this purpose.

The topic of legal reasoning about evidence has been of increasing interest in the AI and Law field in recent years. Two papers are on this subject at this year's Jurix conference. The first, by Jeroen Keppens and Burkhard Schafer, applies model-based reasoning ideas from dynamic logics and update semantics to model some features of evidentiary reasoning in the law. In the other paper, Floris Bex and Henry Prakken present a formalization of legal dialogue moves concerning ways to reinterpret a general rule and illustrate these moves with examples from legal evidentiary reasoning.

Last but not least, two papers are about legal reasoning support systems this year. In the paper by Tom van Engers, Radboud Winkels, et. al., a case study is presented about a web-based system designed to improve the quality of legal aid provided to low income families in The Netherlands. The final paper of this year's conference, by Guido Governatori and Antonio Rotolo, presents a very interesting application of RuleML for monitoring the performance of contracts so as to notify the parties about violations of contractual obligations.

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The members of the program committee this year were

- Trevor Bench-Capon, University of Liverpool
- Daniele Bourcier, University of Paris
- Tom van Engers, University of Amsterdam
- Thomas F. Gordon, Fraunhofer FOKUS, Berlin (Program Chair)
- Arno Lodder, Free University Amsterdam
- Anja Oskamp, Free University Amsterdam
- Henry Prakken, Utrecht University
- Helmut Rüßmann, University of the Saarland
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- Burkhard Schafer, University of Edinburgh
- Erich Schweighofer, University of Vienna
- Bart Verheij, University of Maastricht
- Radboud Winkels, University of Amsterdam