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Guido Governatori Giovanni Sartor (Eds.)

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Preface

This volume presents the papers contributed to Δ EON 2008, the 10th International Conference on Deontic Logic in Computer Science, held in Fiesole (Florence), July 7–9, 2010. This biennial conference series is designed to promote international cooperation amongst scholars who are interested in deontic logic and its use in computer science. The scope of the conference is interdisciplinary, it covers formal-logical studies of normative concepts and normative systems and their links with computer science, artificial intelligence, philosophy, organization theory, and law.

This edition of Δ EON invited submission on the following general themes: the logical study of normative reasoning, including formal systems of deontic logic, defeasible normative reasoning, the logic of action, and other related areas of logic, the formal analysis of normative concepts and normative systems, the formal representation of legal knowledge, the formal specification of aspects of norm-governed multi-agent systems and autonomous agents, including (but not limited to) the representation of rights, authorization, delegation, power, responsibility and liability, the formal specification of normative systems for the management of bureaucratic processes in public or private administration, applications of normative logic to the specification of database integrity constraints, normative aspects of protocols for communication, negotiation and multi-agent decision making. In particular, submissions were solicited addressing application of deontic notions for modelling legal systems.

The 18 papers printed here were selected for presentation at the conference after a thorough process of review and revision of 34 submitted papers. All are original and presented here for the first time. They cover a broad range of topics and approaches. Among the leading themes we can mention the connections preferences, deontic logic and contrary-to-duties, the use of input/output logic, the study of norm dynamics, models of agents and institutions, argumentation, compliance, and various alternative analyses of deontic notions.

In addition to these peer-reviewed papers, we present abstracts or papers of the talks of our four invited speakers, Rosaria Conte (ISTC-CNR, Rome, Italy) Marek Sergot (Imperial College, London, UK), Michele Taruffo (University of Pavia, Italy), and Leendert van der Torre (University of Luxembourg, Luxembourg).

The program of the conference was complemented by workshops on legal ontologies and norm compliance and a workshop in the De Morgan series.

We thank the members of the Program Committee for their invaluable contribution in reviewing the papers. We gratefully acknowledge the support of the European University Institute, the Institute of Theory and Techniques of Legal Information (ITTIG) of the CNR, CIRSFID, University of Bologna, and NICTA.

May 2010

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