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AI Approaches to the Complexity of Legal Systems XI-XII

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Preface

We are delighted to introduce a set of contributions to today's state of the art in Law and Technology in this volume, the fifth in a series on the AI Approaches to the Complexity of Legal Systems (AICOL). Since the first AICOL workshop held in Beijing in 2009, many other have followed, at the crossroads of artificial intelligence, the web of (linked) data, political science, legal theory, and legal studies. Some AICOL workshops, with the same cluster of topics, have taken place in conjunction with EU-funded FP7 and H2020 projects. But most of them have been launched jointly with conferences devoted to AI and law, such as the International Conference of AI and Law (ICAIL) and the International Conference on Legal Knowledge and Information Systems (JURIX).

AICOL I-II, published in 2010, included papers from the first AICOL workshop (co-located with the 24th IVR World Congress, September 15–20, Beijing, China) and the follow up held later that year (co-located with JURIX 2009, November 16–18, Rotterdam, The Netherlands). AICOL III, published in 2012, resulted from the third AICOL workshop (co-located with the 25th IVR World Congress, August 15–20, 2011, Frankfurt, Germany) along with AICOL-IV@IVR (July 21–27, 2013, Belo Horizonte, Brazil), and AICOL-V@SINTELNET-JURIX (December 11, 2013, Bologna, Italy). The fourth volume included papers from AICOL-VI@JURIX 2015, AICOL-VII@EKAW 2016, AICOL-VIII@JURIX 2016, AICOL-IX@ICAIL 2017, and AICOL-X@JURIX 2017. The present volume includes AICOL-XI@JURIX2018, held in Groningen, the Netherlands, on December 12, 2018, and AICOL-XII@JURIX2020, held online via Brno, Czech Republic, on December 9, 2020.

The AICOL proceedings are usually published every two years in the form of a selection of the best papers. The present edition is no exception, although COVID-19 has made things a bit more difficult. We faced this situation by joining forces with Technologies for Regulatory Compliance (TERECOM, from the H2020 Project LYNX H2020-780602) and EXplainable & Responsible AI in Law (XAILA), also held jointly with JURIX in 2020, as detailed in the Introduction. It is worth mentioning that the LAST-JD-RIoE Marie Skłodowska-Curie Innovative Training Network provided some papers with promising research as well.

The present volume contains 21 contributions (17 long papers and 4 short papers). All contributions were submitted to a double peer-review process — first to be accepted at the scientific workshops, and then to be resubmitted, reviewed again, and published. The contributions have been organized into the following blocks: (i) Knowledge Representation; (ii) Logic, Rules, and Reasoning; (iii) Explainable AI in Law and Ethics; (iv) Law as a Web of Linked Data and the Rule of Law; (v) Data Protection, Privacy Modeling, and Reasoning. This time, the volume reflects the ethical turn that has occurred in the field of AI during the past three years, also fostering a new reflection on legal rights, legal governance, and the rule of law.

As always, we thank the reviewers for their excellent work, and we encourage the reader to explore the outcomes of research having in mind what they can observe by themselves, in the ever changing brave new world of digital regulation.

August 2021

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