

## 34th International Conference on Legal Knowledge and Information Systems

- **Mykolas Romeris University**  
**Vilnius, Lithuania**
  - **December 8-10, 2021**
  - <https://jurix2021.mruni.eu>
  - HYBRID, mostly online

Virtual Agora

<https://us06web.zoom.us/j/86719941407?pwd=cmNsbF1lWlhJcEN3aE9SMnNHdFM2dz09>

Meeting-ID: 867 1994 1407

Kenncode: JURIX2021

*Wednesday, December 8th*  
*Workshop Day*

- *AICOL 2021: AI Approaches to the Complexity of Legal Systems*
- *XAILA 2021: EXplainable & Responsible AI in Law*
  - *Hold a joint workshop*
- *AMPM 2021: 1st Workshop in Agent-based Modeling & Policy-Making*
- *LDA 2021: CEILI Workshop on LEGAL DATA ANALYSIS*
- *Legal Tech Workshop (RMU)*
- *Doctoral Consortium*
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- *Tutorial Legal Informatics (University of Vienna with Partners) – will be given later*
- *The First International Workshop on Intelligent Regulatory Systems (no info received)*

09:00-10:30

*Session 1: Workshops I*

10:30-11:00

*Session : Cafe, tee, air etc. break AS YOU LIKE AT YOUR HOME OFFICE*

11:00-12:30

*Session 2: Workshops II*

12:30-13:30

*Session : Lunch AS YOU LIKE AT YOUR HOME OFFICE*

13:30-14:30

*Session 3: Workshops III*

14:30-15:30

*Session 4: Workshops IV*

## **JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET**

*15:30-16:00*

*Session: Cafe, tee, air etc. break AS YOU LIKE AT YOUR HOME OFFICE*

*16:00-17:30*

*Session 5: Workshops V*

*Programm details in the Annex.*

*~~18:00-19:30~~*

*~~Session: Virtual Get2gether JURIX2021– cancelled, meeting possible in the AGORA~~*

# JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET

## Thursday, December 9th Conference Day I

08:30-09:00

Session 6: (Virtual) Opening of JURIX2021

09:00-10:30

Session 7: Knowledge Representation & Data Analysis (Chair: Floris Bex)

Masha Medvedeva, Thijmen Dam, Martijn Wieling and Michel Vols. Automatically Identifying Eviction Cases and Outcomes within Case Law of Dutch Courts of First Instance

Huihui Xu, Jaromir Savelka and Kevin Ashley. Accounting for Sentence Position and Legal Domain Sentence Embedding in Learning to Classify Case Sentences

Adeline Nazarenko, François Lévy and Adam Wyner. A Pragmatic Approach to Semantic Annotation for Search of Legal Texts. An Experiment on GDPR

10:30-11:00

Session : Cafe, tee, air etc. break AS YOU LIKE AT YOUR HOME OFFICE

11:00-12:30

Session 8: Explainable AI (Chair: Pompeu Casanovas)

Cor Steging, Silja Renooij and Bart Verheij. Rationale Discovery and Explainable AI

Francesco Sovrano, Salvatore Sapienza, Monica Palmirani and Fabio Vitali. A Survey on Methods and Metrics for the Assessment of Explainability under the Proposed AI Act (short paper)

Réka Markovich and Olivier Roy. Cause of Action and the Right to Know (short paper)

Jack Mumford, Katie Atkinson and Trevor Bench-Capon. Explaining Factor Ascription (short paper)

Antonino Rotolo, Guido Governatori, Francesco Olivieri, Matteo Cristani and Abdul Sattar. Computing Private International Law (short paper)

12:30-13:30

Session : Lunch AS YOU LIKE AT YOUR HOME OFFICE

13:30-14:30

Session 9: Invited Talk I: Legal Visualization & Legal Logic (Chair: Erich Schweighofer)

13:30-14:30

Friedrich Lachmayer and Vytautas Čygas. Visualization of Legal Informatics

14:30-15:30

Session 10: Legal Logic (Chair: Katie Atkinson)

Matteo Pascucci and Giovanni Sileno. Computability of Diagrammatic Theories for Normative Positions

Agata Ciabattoni, Xavier Parent and Giovanni Sartor. A Kelsenian deontic logic

15:30-16:00

Session : Cafe, tee, air etc. break AS YOU LIKE AT YOUR HOME OFFICE

## **JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET**

16:00-17:30

Session 11: Text Mining (Chair: Monica Palmirani)

Karam Kharraz, Martin Leucker and Gerardo Schneider. Timed Dyadic Deontic Logic

Tien-Hsuan Wu, Ben Kao, Felix Chan, Anne Sy Cheung, Michael Mk Cheung, Guowen Yuan and Yongxi Chen. Semantic Search and Summarization of Judgments Using Topic Modeling (short paper)

Bakhtiar Amaludin, Fitria Ratna Wardika, Putu Jasprayana Mudana Putra and I Gede Yudi Paramartha. Analyze the Usage of Legal Definitions in Indonesian Regulation using Text Mining Case Study: Treasury and Budget Law (short paper)

Ha-Thanh Nguyen, Kiyooki Shirai and Nguyen Le Minh. Few-shot Tuning Framework for Automated Terms of Service Generation (short paper)

Ellen Souza, Douglas Vitório, Gyovana Moriyama, Luiz Santos, Lucas Martins, Mariana Souza, Márcio Fonseca, Nádia Félix, André C. P. L. F. Carvalho, Hidelberg O. Albuquerque and Adriano L. I. Oliveira. An Information Retrieval Pipeline for Legislative Documents from the Brazilian Chamber of Deputies (short paper)

Agnieszka Jablonowska, Francesca Lagioia, Marco Lippi, Hans Wolfgang Micklitz, Giovanni Sartor and Giacomo Tagiuri. Assessing the Cross-Market Generalization Capability of CLAUDETTE System (short paper)

18:30-20:00

*Session : Virtual Get2gether JURIX2021 (link sent to you by email)*

20:00-22:00

*Dinner (for local participants)*

### **Friday, December 10th Conference Day II**

09:00-10:30

Session 13: Legal Text Corpora and Meta Data (Chair: Matthias Grabmair)

David Hickey and Rob Brennan. A GDPR International Transfer Compliance Framework based on an Extended Data Privacy Vocabulary (DPV)

Ingo Glaser, Sebastian Moser and Florian Matthes. Generation of Legal Norm Chains: Extracting the Most Relevant Norms from Court Rulings

Michael van der Veen and Natalia Sidorova. Signal Phrase Extraction: a Gateway to Information Retrieval Improvement in Law Texts (short paper)

Tereza Novotná. Human Evaluation Experiment of Legal Information Retrieval Methods (short paper)

10:30-11:00

Session : Cafe, tee, air etc. break AS YOU LIKE AT YOUR HOME OFFICE

11:00-12:30

Session 14: Ethics and AI (Chair: Bart Verheij)

Emiliano Lorini and Giovanni Sartor. The Ethics of Controllability as Influenceability

## **JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET**

Michał Araszkiwicz, Enrico Francesconi and Tomasz Zurek. Identification of Contradictions in Regulation

Floris Bex and Henry Prakken. Can Predictive Justice Improve the Predictability and Consistency of Judicial Decision-Making? (short paper)

Benjamin Clavié and Marc Alphonsus. The Unreasonable Effectiveness of the Baseline: Discussing SVMs in Legal Text Classification (short paper)

12:30-13:30

Session : Lunch AS YOU LIKE AT YOUR HOME OFFICE

13:30-14:30

Session 15: Invited Talk II: Legal Informatics, AI & Law and the Future of IT in and for Legal Systems (Chair: Paulius Pakutinskas)

14:30-15:30

Session 16: Data Analytics (Chair: Giovanni Sator)

Hannes Westermann, Jaromir Savelka, Vern R. Walker, Kevin D. Ashley and Karim Benyekhlef. Data-Centric Machine Learning: Improving Model Performance and Understanding Through Dataset Analysis

Aniket Deroy, Paheli Bhattacharya, Saptarshi Ghosh and Kripabandhu Ghosh. An Analytical Study of Algorithmic and Expert Summaries of Legal Cases

15:30-16:00

Session : Cafe, tee, air etc. break AS YOU LIKE AT YOUR HOME OFFICE

16:00-17:00

Session 17: Information Filtering and Document Summarization (Chair: Adam Wyner)

Arpan Mandal, Paheli Bhattacharya, Sekhar Mandal and Saptarshi Ghosh. Improving Legal Case Document Summarization using Document-specific Catchphrases (short paper)

Shubham Pandey, Ayan Chandra, Sudeshna Sarkar and Uday Shankar. Towards Reducing the Pendency of Cases at Court: Automated Case Analysis of Supreme Court Judgments in India (short paper)

Monica Palmirani, Francesco Sovrano, Davide Liga, Salvatore Sapienza and Fabio Vitali. Hybrid AI Framework for Legal Analysis of the EU Legislation Corrigenda (short paper)

17:00-17:30

Session 18: (Virtual) Closing of JURIX2021

*Joint AICOL-XAILA workshop @JURIX 2021*

*Online event: [WebEx link](#). [Wydział Prawa i Administracji UJ - WEBEX - Start Your Meeting](#)  
After clicking the link, a web site will open, where perhaps you need to switch from Polish to English.*

*all hours in EET (Vilnius time)*

*10.45-11.00 Introductions*

*11:00 - 12:30 Session 1*

*Tomasz Zurek, Taylor Woodcock, Magdalena Pacholska and Tom Van Engers,  
Computational modelling of the proportionality analysis under International  
Humanitarian Law for military decision-support systems*

*Mercedes Martinez-Gonzalez, Pompeu Casanovas, María Luisa Alvite-Díez, Nuria  
Casellas, Amador Aparicio and David Sanz, Ontologies and Blockchain for privacy  
compliance: the OntoROPA project*

*Guido Governatori  
A Short Note on the Chisholm Paradox*

*12:30 - 13:30 Lunch*

*13:30 - 15:00 Session 2*

*Pompeu Casanovas, Mustafa Hashmi and Louis de Koker  
A Three Steps Methodological Approach for Legal Governance Validation*

*Francesco Sovrano, Fabio Vitali and Monica Palmirani  
DoX: an Algorithm to Objectively Quantify Explainability Based on Legal  
Requirements*

*Monica Palmirani and Davide Liga, University of Bologna  
Derogations Analysis of European Legislation through Hybrid AI Approach*

*15:00-15:30 Coffee break*

*15:30 - 17:00 Session 3*

*Marco Billi, Roberta Calegari, Giuseppe Contissa, Giuseppe Pisano, Galileo Sartor  
and Giovanni Sartor  
Explaining conflicts of norms in criminal matters: an argumentation approach*

## JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET

*Abílio Azevedo, Davide Carneiro and Patrícia Azevedo*

*The status of Humans in the Era of AI: ethical problems and the possibility of machine rights*

*Radosław Pałosz, Michał Araszkiewicz and Grzegorz J. Nalepa*

*Explainability in the Artificial Intelligence Act*

### **AMPM 2021: First Workshop in Agent-based Modeling & Policy-Making**

*in conjunction with JURIX 2021, the 34th International Conference on Legal Knowledge and Information Systems, Vilnius, Lithuania*

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- *Workshop date: December 8, 2021*
- *Venue: virtual (Zoom Meeting ID: 858 5415 3566, Passcode: AMPM01)*
- *Code of conduct*
- *Contact: [ampm2021@easychair.org](mailto:ampm2021@easychair.org)*

#### **Opening & Keynote Speech**

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*12:30 - 13:30 (CET 11:30 - 12:30, UTC 10:30 - 11:30)*

- *Introduction (15min)*
- **Bruce Edmonds**, *Understanding social norms: a multi-level, policy modelling approach*  
*10 min pause*

#### **Session 1 - Contexts and Topics**

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*13:40 - 14:40 (CET 12:40 - 13:40, UTC 11:40 - 12:40)*

- **Katharina Luckner and Veronika Fikfak**. *\*Why the Study of International Law Needs Agent-based Modeling: The Case of Compliance*
- **Valentina Punzo**. *Dissecting crime through ABM. From theory testing to policy design*
- **Margherita Vestoso and Ilaria Cecere**. *Exploring the boundaries between law, ABM and policy-making: on the clash between formal and informal norms*
- **Sebastian Benthall, Joshua Epstein, Erez Hatna, Katherine Strandburg and Michael Tschantz**. *Towards Regulatory Design with Agent-Based Modeling at the Boundary of Law and Software*  
*10 min pause*

#### **Session 2 - Models**

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*14:50 - 15:50 (CET 13:50 - 14:50, UTC 12:50 - 13:50)*

## **JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET**

- *Gido Schoenmacker, Wander Jager and Rineke Verbrugge. Empirically grounded agent-based policy evaluation of the adoption of sustainable lighting under the European Ecodesign Directive*
- *Martina Fazio, Alessandro Pluchino, Giuseppe Inturri, Michela Le Pira, Nadia Giuffrida and Matteo Ignaccolo. Agent-Based Modelling of Mobility Restrictions at a Large Scale: Exploring the Impact on the COVID-19 Spreading in Italy*
- *Laura Mazzarino, Alessio Emanuele Biondo and Damiano Rossello. Portfolio Optimization and Trading Strategies: a simulation approach*
- *Jan de Mooij, Davide Dell'Anna, Parantapa Bhattacharya, Mehdi Dastani, Brian Logan and Samarth Swarup. Using Agent-Based Simulation to Investigate Behavioural Interventions in a Pandemic using Mobility Data*  
10 min pause

### ***Session 3 - Methods and Technologies***

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16:00 - 16:45 (CET 15:00 - 15:45, UTC 14:00 - 14:45)

- *Etienne Houzé, Ada Diaconescu and Jean-Louis Dessalles. Using Decentralised Conflict-Abduction-Negation in Policy-making*
- *Alejandro Morales. Self-optimization for transdisciplinary intervention*
- *Ada Diaconescu, Dominique Blouin and Alice Ludvig. Multi-paradigm Modelling for Policy-driven Socio-technical Systems*

### ***Closing***

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16:45 - 17:15 (CET 15:45 - 16:15, UTC 14:45 - 15:15)

## ***CEILI Workshop on Legal Data Analysis***

***8 December 2021***

***13:30-17:30 hours EET***

<https://ceili.at>

<https://us06web.zoom.us/j/86719941407?pwd=cmNsbFl1WlhJcEN3aE9SMnNHdFM2dz09>

Meeting-ID: 867 1994 1407

Kenncode: JURIX2021

***Paper session - start at 13:30 hours EET (= 12.30 CET)***

*Bianca Steffes Using legal judgement prediction with the Bag-Of-Words model to aid legal experts*

*Vytautas Cyras, Visualisation as a tool of legal text analysis*

## **JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET**

*Erich Schweighofer Holy Trinity of Communication of Laws*

*Panel discussion with authors and additional panelists, s start at 15.30 hours  
EET (= 14.30 CET)*

*Stefan Eder Use of Knowledge Graphs in Legal Information Systems*

*Erich Schweighofer Possible Products of Legal Text Analysis NOW and Cooperation  
Framework between Lawyers and Informatics*

*Christoph Sorge and Bianca Steffes Research on Legal Text Analysis at the University of  
Saarland*

*Raymond Rasser Training of Lawyers – The Client’s View*

### ***Workshop for advocates and court administrations „Use of information technology in judicial processes”***

*09:00-13:00 in Lithuanian only*

## ***8 th December 2021 JURIX 2021 Doctoral Consortium Programme***

*EET ZONE TIME*

*9.00 – 11.00 Welcome*

*First Session 9.15-9.45*

*Pietro Dunn, University of Bologna-University of Turin\_University of Luxembourg The  
tipped scale: EU intermediary liability regulation and the challenge of human rights-related  
risks*

*9.45-10.15 Giovana Lopes, University of Bologna Cognitive Bias in the Judiciary: The role of  
cognitive enhancement*

*10.15-10.45 Jordan I. Robinson, University of Liverpool, Liverpool Distributed Hypothesis  
Generation and Evaluation*

*10.45 – 11.00 Coffee break*

*11.00 – 13:00 Second Session*

*11.00-11.30 Markus Schröder, University of Passau The risk-based approach in the GDPR*

*11.30-12.00 Yevhen Shcherbyna, Mykolas Romeris University The concept of consideration  
and smart contracts on a blockchain. Theoretical controversies.*

*12.00-12.30 Gabriele Suffia, University of Bologna, University of Milan Legal principles for  
a cooperative decentralized data platform for communities*

## **JURIX2021 at MRU in Vilnius, LT, Progr\_9dec21, times: EET**

*12.30-13.00 Malwina Anna Wojcik, University of Bologna Addressing algorithmic discrimination in healthcare – the European legal perspective 13.00-13.30 Yasaman Yousefi, University of Bologna Fairness in Gendered Algorithms: Open Issues and New Paradigm*

*Notes:*

*Version 8 December 2021es*

*Chairs status: confirmed.*