

# ReMeP 2019

## Legal Informatics Conference in Vienna, Austria

**23. – 24 September 2019**

### Target Audience

Businesses which are interested in digitalising certain tasks, want to learn about specific applications or just want to get an insight into current research in the field of legal informatics.

### Time

Monday, 23 September 2019,  
11:30am till Tuesday 24 September  
2019, 5:30pm

### Venue

Vienna University of Economics  
and Business  
Welthandelsplatz 1,  
A-1020 Vienna

Co-Host:



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## Welcome to ReMeP 2019 – Research Meets Practice

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*Dear Guests,*

*ReMeP is a new platform with the ambitious objective to combine the wisdom and knowledge of researchers from across the world with the practical experience of those working in the fields of law and informatics. The desired outcome is good access for all to new legal tech tools. So that at the end of the day legal informatics will support all those who interact with the law and legal processes.*

*ReMeP 2019 is a kick-off event and there are many other activities to follow. For example, a platform to provide access to information on new developments in this area and a number of events for researchers and practitioners. Together, we will evolve our thinking, find ways to make the best use of new technologies and, most importantly, demystify legal informatics and show the world that this science is built upon logic and not artificial at all.*

*Join us in building ReMeP as an open platform for researchers, practitioners and developers. As a place where you can present your research and developments and voice your concerns. As a place where information is available freely and without restrictions and where interaction between all participants helps to make applications affordable to as many as possible.*

  
Stefan Eder, Conference Chair

## Programme - Overview

### Monday, 23 September 2019

11:30 – 12:30	Registration <i>Once you enter the Teaching Center, please turn to your left and come to our registration desk. Please bring your ticket.</i>	Teaching Center
12:30 – 12:45	Welcome: <b>Tatjana Oppitz</b> , incoming vice president for infrastructure and digitalisation, Vienna University of Economics and Business	TC 0.03
12:45 – 13:30	Opening Address: <b>Stefan Eder</b> , Conference Chair	TC 0.03
13:30 – 14:15	Keynote: <b>Prof. em. Robert Kowalski</b> , Imperial College London <i>The language of law as a model for the computer languages of the future</i>	TC 0.03
14:15 – 15:00	Keynote: <b>Prof. Florian Matthes</b> , Technical University Munich <i>A business ecosystem perspective on legal informatics services</i>	TC 0.03
15:00 – 15:45	Break	Mensa
15:45 – 16:15	Q&A with <b>Prof. Robert Kowalski</b> and <b>Prof. Florian Matthes</b> Moderator: <b>Prof. A Min Tjoa</b> , Technical University of Vienna	TC 0.03
16:15 – 16:50	Panel Discussion: <b>Prof. Martin Winner</b> , Vienna University of Economics and Business; <b>Alberto Sanz de Lama</b> , CEO, LexisNexis Austria; <b>Prof. A Min Tjoa</b> , Technical University of Vienna; <b>Asst. Prof. Jakub Harašta</b> , Masaryk University; Moderator: <b>Christine Wahlmüller-Schiller</b> , CWS Kommunikation & Consulting <i>The impact of legal tech on the future work environment</i>	TC 0.03
16:50 – 17:30	Fireside Chat: <b>Prof. Jonathan Askin</b> , Brooklyn Law School <i>A life in legal informatics</i>	TC 0.03
19:00 – 22:00	Dinner Reception by the Mayor of the City of Vienna Dinner Keynote: <b>Jelena Madir</b> , Chief Counsel EBRD, who will present some key findings of the new book FinTech: Law and Regulation	Vienna City Hall

### Tuesday, 24 September 2019

09:00 – 09:05	Welcome: <b>Stefan Eder</b> , Conference Chair			TC 0.03
09:05 – 09:30	Orientation: <b>Prof. Erich Schweighofer</b> , University of Vienna			TC 0.03
09:40 – 11:00	<b>Matthias Lichtenthaler:</b> <i>Document assembly of the future</i>	<b>Edgar Weippl:</b> <i>Secure systems?;</i> <b>Stefan Eder:</b> <i>Coding 101</i>	<b>Francesco Sovrano:</b> <i>Algorithmic Decision Making (ADM)</i>	
	TC 5.13	TC 5.03	TC 5.01	
11:10 – 12:30	<b>Andreas Geyrecker, Günther Schefbeck, Shefali Virkar:</b> <i>Modern search techniques</i>	<b>Daniel Braun, Christian Sageder, Florian Matthes:</b> <i>Contract management</i>	<b>Tomer Libal, Tereza Novotná:</b> <i>Automated Reasoning on legal texts</i>	
	TC 5.13	TC 5.03	TC 5.01	
12:30 – 13:30	Lunch Break			
13:30 – 14:50	<b>Andreas Geyrecker, Günther Schefbeck, Shefali Virkar:</b> <i>Modern search techniques</i>	<b>Daniel Braun, Christian Sageder, Florian Matthes:</b> <i>Contract management</i>	<b>Tomer Libal, Tereza Novotná:</b> <i>Automated Reasoning on legal texts</i>	
	TC 5.13	TC 5.03	TC 5.01	
15:00 – 16:20	<b>Andreas Geyrecker, Günther Schefbeck, Shefali Virkar:</b> <i>Modern search techniques</i>	<b>Daniel Braun, Christian Sageder, Florian Matthes:</b> <i>Contract management</i>	<b>Tomer Libal, Tereza Novotná:</b> <i>Automated Reasoning on legal texts</i>	
	TC 5.13	TC 5.03	TC 5.01	
16:20 – 17:00	Wrap-up			

## Programme and Speakers

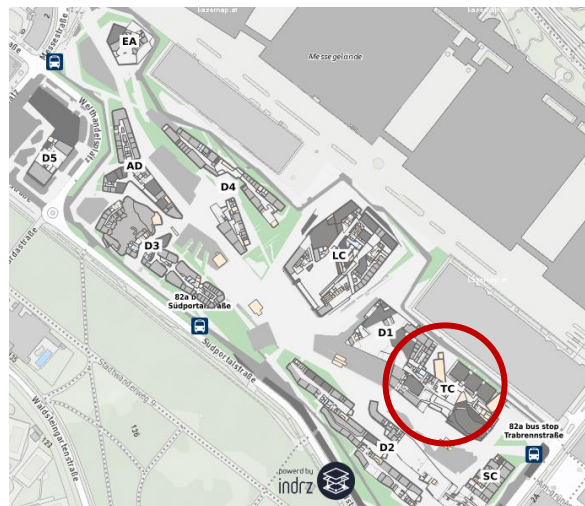
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**Monday, 23 September 2019**

**11:30 – 12:30: Registration** (*Lobby of the Teaching Center*)

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The conference takes place at the Teaching Center of the Vienna University for Economics and Business, Welthandelsplatz 1, 1020 Vienna. When you enter the building, please turn to your left and come to our registration desk. Please bring your ticket (either printed or on your mobile phone).



**12:30 – 12:45: Welcome** (*TC 0.03*)

***Tatjana Oppitz, Incoming Vice President for  
Infrastructure and Digitalisation of WU Vienna***

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On behalf of our host, the Vienna University for Economics and Business, Ms Oppitz will welcome our guest to our conference venue.

### About the speaker

Born in Kalkutta, India to a diplomat, Tatjana Oppitz has always led an international life. She graduated from the Vienna University of Economics and Business and then worked for some years for an American corporate.

In 1989, she joined the technology giant IBM where she was one of the first women active in sales. She had an impressive career at IBM, starting out as a client representative for the public sector and in the end acting as Country General Manager of IBM Austria until end of 2017.



Tatjana Oppitz has recently returned to her *alma mater*, the Vienna University of Economics and Business, as Vice President for Infrastructure and Digitalisation. With her international background at a leading technology corporate she will, above all, support the implementation of the University's comprehensive digitalisation strategy.

**12:45 – 13:30: Opening Address** (*TC 0.03*)

***Stefan Eder, Conference Chair***

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This is the inaugural year for the ReMeP – Research Meets Practice conference. We plan for many more to come! The idea behind the ReMeP is simple and yet innovative: There are many excellent conferences in the legal tech and fintech sectors. However, those events only cater to a specific audience. Sometimes they are only for the researchers, other times businesses are presented with finished products that might not suit their needs. The ReMeP 2019 is different: We bring businesses and researchers together. If the researchers who



develop new solutions and the executives, as prospective users, communicate directly with each other, this will have multiple benefits.

On the first day, internationally recognized experts will give a topical introduction. The second day is dedicated to the presentation and practical experience of research projects and exchange of thoughts. A few chosen researchers will give a short explanation of their work during workshops and answer questions afterwards.

### About the speaker

**Stefan Eder** is a lawyer and partner at Benn-Ibler Rechtsanwälte GmbH, an Austrian law firm with clients around the globe. He focuses, among other things, on IT law and data protection and has advised corporates and private clients on IT-related issues for more than 30 years.



Aside from the law he also studied business informatics which gives him a sound technological background and helps him building a bridge between the worlds of IT and law. He regularly lectures on various aspects of technology and the law, both at the Technical University of Vienna and at the Vienna University for Economics and Business.

He is also invested in a few companies that are active in the legal tech arena. He mentors a number of legal tech start-ups and as the founder of the Viennese chapter of the Legal Hackers he aims to promote the research and development of creative solutions at the interface between IT and the law.

**13:30 – 14:15: Keynote (TC 0.03)**

***Prof. em. Robert Kowalski, Imperial College London***

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### **TITLE: The language of law as a model for the computer languages of the future**

#### **Abstract**

The rules of law, including the rules of both government legislation and private contracts, are designed to satisfy social goals by regulating human behaviour. To be effective, they need to be expressed in a style of language that is both clear and unambiguous, so that the consequences of obeying or violating the rules can be readily predicted. In this respect, they are like programs to be executed by humans rather than by computers.

In contrast to the language of law, imperative computer languages are machine-oriented languages, which force humans to think like computers. Instead of expressing facts about the world, goals to be solved and ways of solving goals, they express commands to alter the state of memory locations in a computer.

I will argue that the computer languages of the future need to take their inspiration from the rule-based language of the law. I will show how a constrained form of English, which can be understood without computer training, can represent a wide range of computer applications, including legal applications involving smart contracts.

For example, *if a person is registered to attend a conference, and the person does not pay the registration fee for the conference before the deadline for payment, then the person is sent a reminder for payment. If a person does not pay the registration fee for a conference within two days of sending a reminder for payment, then the registration of the person to attend the conference is terminated.* It may be long-winded, but at least it is intelligible, unambiguous and computer executable.

## About the Speaker

Robert Kowalski is Emeritus Professor at Imperial College London. He studied at the University of Chicago, the University of Bridgeport, Stanford University, the University of Warsaw, and the University of Edinburgh, where he completed his PhD in 1970. He joined Imperial College in 1975.



Kowalski's early research was in the field of automated theorem-proving, leading to the development of logic programming in the early 1970s. His later research has focused on the use of logic programming for knowledge representation and problem solving, including work on the event calculus, legal reasoning, abductive reasoning and argumentation.

He is currently working with Fariba Sadri on developing the logic and computer language LPS, and with Miguel Calejo on the logical representation and execution of legal contracts. The philosophical background for this work is presented in his 2011 book *Computational Logic and Human Thinking – How to be Artificially Intelligent*. An open-source, online prototype of LPS, with examples of executable logical contracts is accessible from <http://lps.doc.ic.ac.uk/>.

During the 1980s, Kowalski was heavily involved in the British response to the Japanese Fifth Generation Project. He also served as an advisor to the UNDP Knowledge Based Systems Project in India, and to DFKI, the German Institute for Artificial Intelligence. Recently he has been an advisor to the Department of Immunization, Vaccines and Biologicals, of the World Health Organization in Geneva.

Kowalski is a Fellow of the Association for the Advancement of Artificial Intelligence, the European Association for Artificial Intelligence, and the Association for Computing Machinery. He received the IJCAI (International Joint Conference of Artificial Intelligence) award for Research Excellence in 2011, and the Japanese Society for the Promotion of Science Award for Eminent Scientists for 2012-2014.

**14:15 – 15:00: Keynote (TC 0.03)**

***Prof. Florian Matthes, Technical University Munich***

**TITLE: A business ecosystem perspective on legal informatics services**

## Abstract

We first describe the current business ecosystem of the legal sector consisting of a diverse set of legal service providers and consumers and their business relationships. Based on this model we identify current trends, challenges and opportunities to augment this business ecosystem with IT-enabled legal services.

In order to overcome these challenges and realize the potential of innovative legal informatics solutions, we propose to apply successful approaches from other service-dominant industries, like open / shared source, open / shared data, software as a service, platform strategies, a significant increase of capital investments in R&D, or regulatory measures.

## About the Speaker

Since 2002 Florian Matthes holds the chair for Software Engineering for Business Information Systems at Technische Universität München.

The current focus of his research is on technologies driving the digital transformation of enterprises and societies: Enterprise architecture management, service platforms and their ecosystems, semantic analysis of legal texts and executable contracts on blockchains.



He is co-founder and chairman of the board of CoreMedia and infoAsset, co-founder of Tr8cy, scientific advisor of UnternehmerTUM, member of the Münchner Kreis, scientific advisor of Noumena Digital, member of the advisory board of the Ernst Denert-Stiftung für Software Engineering , coordinator of the blockchain.tum.de research cluster and initiator and organizer of international conferences and workshops in software and enterprise engineering.

Earlier stations of his academic career are the Goethe-University Frankfurt (Diploma 1988) the University of Hamburg(PhD 1992), the Digital Systems Research Center (now HP SRC Classic) in Palo Alto, USA (Researcher 1992-1993), and the Technical University Hamburg-Harburg (Associate Professor 1997-2002).

Until 2010 he served as dean of studies at the Faculty for Informatics and member of the teaching board of TU München.

### 15:00 – 15:45: Coffee Break (*Mensa*)

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The WU Mensa is in a building right next the Teaching Center, only a couple of minutes away.

It is not your typical university canteen but rather a stylish location which is in no way inferior to a restaurant - with a great selection of food that leaves nothing to be desired.



### 15:45 – 16:15: Q&A Session (*TC 0.03*)

*Moderator: Prof. A Min Tjoa*

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#### Abstract

Professors Robert Kowalski and Florian Matthes are available to answer any additional questions that you may have about their keynotes in a Q&A session moderated by their peer, Professor A Min Tjoa.

#### About the Moderator

Professor Dr. A Min Tjoa has been a full professor and director of the Institute of Software Technology and Interactive Systems at the Vienna University of Technology since 1994.

He is the chairman of the Austrian National Competence Center for Security Research (Competence Centers for Excellent Technologies Initiative of the Austrian government). He was visiting professor at the Universities of Zurich, Kyushu and Wroclaw (Poland) and at the Technical Universities of Prague and Lausanne (Switzerland). From 1999 to 2003, he was the president of the Austrian Computer Society.



He is vice-chairman of the IFIP Technical Committee for Information Systems and chairman of the IFIP Working Group on Enterprise Information Systems. Member of the Board (Senate) of the Christian Doppler Foundation for the establishment of high-technology transfer labs in Austria. He is also the University of Technology's Coordinator of the ASEA-UNINET (ASEAN-EU University Network) and Vice-Chairman of the DEXA Association (Database and Expert System Applications).

He has served as chairman of several international conferences including the IEEE Int. Conf. on Distributed Computing Systems (ICDCS), European Software Engineering Conference (ESEC), ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE), the International Conference on Database and Expert Systems Applications (DEXA), the International Conference on Electronic Commerce and Web Technologies (EC-Web). He was Honorary Chairman of the International Conference on Very Large Databases (VLDB 2007).



In 2011 he received the honorary doctoral degree (Dr.h.c.) from the Czech Technical University in Prague and the honorary professor degree of the University of Hue (Vietnam). He is currently member of the Council of Doctoral Studies in Mathematics, Informatics and Telecommunication (Conseil de l' Ecole Doctorate Mathématique, Informatique et Telecommunications de Toulouse) which covers all universities in the Toulouse area.

His current research focus areas are data warehousing, cloud computing, semantic web, security, and non-standard IT-applications.

He has published more than 200 peer reviewed articles in journals and conferences.

**16:15 – 16:50: Panel Discussion (TC 0.03)**

*Prof. Martin Winner, WU Vienna*

*Alberto Sanz de Lama, LexisNexis*

*Prof. A Min Tjoa, Technical University of Vienna*

*Asst. Prof. Jakub Harasta, Masaryk University*

*Moderator: Christine Wahlmüller-Schiller, CWS Kommunikation & Consulting*

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**TITLE: The impact of legal tech on the future work environment**



Prof. Martin Winner



Alberto Sanz de Lama



Prof. A Min Tjoa



Asst. Prof. Jakub Harašta



Christine Wahlmüller-Schiller

### About the Panelists

**Prof. Martin Winner** is a professor for business law at the Vienna University of Economics and Business (WU). He is also director of the Research Institute of Central and Eastern European Business Law (WU), Director of the Centre of IP/IT-Law (WU) and Chairman of the Austrian Takeover Commission.

His research currently focuses on company law and securities regulation, intellectual property law, comparative law (esp. CEE) and general business law, contracts and property. In 1993, he graduated in Business Administration at the Vienna University of Economics and Business and completed graduate and postgraduate studies of law at the University of Vienna.

Aside from his university career, he has also gained considerable practical experience. As Chairman of the Takeover Commission he cooperates with national and international supervisors of the securities markets. He is also a member of ESMA's Takeover Bids Network and advisor to the Austrian Ministry of Justice (e.g. Takeover Act 1998, implementation of the Takeover Directive 2006), member of many working groups in the Ministry of Justice and has participated in working groups of the Council of the European Union for the Ministry of Justice.

**Alberto Sanz de Lama** studied business administration at the University of Zurich and completed the top-ranked MBA graduate programme at INSEAD. He began his career at Fontainebleau Procter and Gamble, and then worked as brand manager at the consulting firm McKinsey. In 2000, he became Vice President of Mobipay and later director for marketing and sales of Ebay Austria and director of the Autoscout24 group.

Since 2015, he has been managing director of LexisNexis Austria, one of the leading providers of legal, tax and regulatory information to law and tax practitioners.

**Prof. A Min Tjoa:** please see his bio above (he moderates the slot from 15:45 – 16:15)

**Jakub Harašta** is assistant professor at Institute of Law and Technology, Faculty of Law, Masaryk University. In his research, he focuses on legal informatics, data protection and cyber security.

Jakub Harašta teaches legal informatics (focusing on legal information retrieval) aspiring lawyers at university, but also judges and clerks at the Judicial Academy of the Czech Republic. Finally, Jakub serves as editor-in-chief of Masaryk University Journal of Law and Technology.

**Christine Wahlmüller-Schiller** has been a professional editor in the IT industry since 2003. She wrote for the IT magazine Monitor (Bohman Verlag) until 2016 and since then has been editor at the specialist IT journals Computerwelt and it&business.

Ms Wahlmüller-Schiller studied communications science and for many years has moderated numerous IT expert panel discussions and business events. Since August 2019, she also supports the marketing and communications activities of the Austrian Association of the Software Industry (VÖSI).

**16:50 – 17:30: Fireside Chat (TC 0.03)**

*Jonathan Askin, Brooklyn Law School*

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**TITLE: A life in legal informatics**

**Abstract**

Our conference chair, Stefan Eder, will speak to Jonathan Askin about his life spent at the intersection of the law and technology. Jonathan Askin was one of the originators of the so-called Legal Hacker movement. Among other things, he will share his insights on where the movement came from, some of its accomplishments and his views of where it might go in the future.

**About the Speaker**

Jonathan Askin is a professor at Brooklyn Law School, teaching technology, telecommunications, and entrepreneurial law and policy.

He is the Founder of the Brooklyn Law Incubator & Policy Clinic, which provides full service, pro bono, legal support for bootstrapped entrepreneurs, startups, innovators, and organizations, typically exploring ventures and issues the law has not anticipated. He is also the Faculty Chair and Innovation Catalyst for the Brooklyn Law Center for Urban Business Entrepreneurship.



Jonathan has served as a Visiting Professor at the MIT Media Lab, a Fulbright Scholar with the University of Amsterdam's Institute for Information Law, a Visiting Professorial Fellow at the Centre for Commercial Law Studies, Queen Mary University of London, a Fellow at the Columbia Institute for Tele-Information, an Adjunct Professor at Columbia Law School, and Founder/Advisor to iLINC, a network of legal support clinics for the European startup community.

Jonathan chaired the Internet Governance Working Group for the Obama '08 Presidential Campaign, and has served as lead counsel and on the boards of many communications and Internet ventures, industry associations, and consumer advocacy groups. Jonathan is an honors grad of both Harvard College and Rutgers Law School.

**19:00 – 22:00: Dinner Reception**  
**by the Mayor of the City of Vienna (*Vienna City Hall*)**  
**Dinner Keynote**

*Jelena Madir, EBRD*

Our conference dinner will be hosted by the Mayor of the City of Vienna and take place at the Senate's Chamber of the Vienna City Hall at Lichtenfelsgasse 2, Feststiege 1.

The Senate Chamber is one of the most impressive rooms of the City Hall. It usually serves as the meeting room of the City Senate.

We will have a stand-up dinner which will ensure that there is ample time to network and get to know as many of your fellow guests as possible.



**KEYNOTE TITLE: FinTech: Law and Regulation**

Jelena Madir has recently finished editing the book *FinTech: Law and Regulation*. It is going to be published in the Elgar Financial Law and Practice series in mid-September 2019. She will offer a first glimpse of the publication which, above all, deals with the challenges for regulators posed by the rapid developments in the FinTech area.

It includes contributions from more than 30 FinTech experts from ten different countries. Topics range from cryptoassets, the blockchain and smart contracts to funding platforms and much more. The book also discusses the challenges of patenting FinTech inventions and regulating robo-advisors. It takes a practical view of the questions. Thus, it promises to become a valuable guide for everyone working on or interested in these matters.

**About the Speaker**

Jelena Madir is a Chief Counsel at the European Bank for Reconstruction and Development (EBRD) in London. She heads the Financial Law Unit, which provides advisory services to governments in the areas of access to finance, FinTech, corporate governance and insolvency. She is the editor of the book titled *FinTech: Law and Regulation* (2019). Before her appointment as the Head of EBRD's Financial Law Unit in 2016, Jelena spent seven years as a transactional lawyer in the Bank's Legal Department, where she worked on a variety of EBRD's lending and equity investment operations, and one year in EBRD's Compliance Department, where she led the set-up of the capital markets' compliance function and of the new sanctions regime.



Prior to joining the EBRD, Jelena worked as a finance and capital markets lawyer at Cleary Gottlieb Steen & Hamilton LLP in Washington, D.C.; Shearman & Sterling LLP in Frankfurt, Germany; and Privredna Banka and DLA Piper LLP in Zagreb, Croatia. Jelena received her Juris Doctor from Columbia University School of Law and completed her undergraduate studies in Government and Asian studies at Dartmouth College. She is admitted to practice law in Washington, D.C., as well as England and Wales; and to the Roll of Solicitors in the Republic of Ireland.

**Tuesday, 24 September 2019**

**09:00 – 09:05: Welcome (TC 0.03)**

***Stefan Eder, Conference Chair***

Stefan Eder welcomes you to the second day of ReMeP 2019 – Research Meets Practice and briefly explains the structure of this day, most of which will be taken up by interactive workshops.

The colour code on your delegate badge will point you to the correct room / workshop. You will be able to experience almost all workshops. Only for the first slot (9.40 – 11.00) will you need to decide on one of the available options.

**09:05 – 09:30: Orientation (TC 0.03)**

***Prof. Erich Schweighofer, University of Vienna***

Professor Schweighofer will introduce the workshop leaders and briefly speak about the contents of and ideas behind all workshops so that you get a good overview of what to expect from this day.

#### **About the Speaker**

Erich Schweighofer is Professor of Legal Informatics, International Law and European Law and head of the Centre for Computers and Law at the University of Vienna. He leads the Centre for Computers and Law – one of the top-10 research groups in Legal Informatics worldwide.

Erich Schweighofer is an international expert in legal informatics and internet governance. He has been involved in many research projects, above all, text analysis, data protection, surveillance technologies and IT security.



He is also one of the main organisers of IRIS – a Legal Informatics symposium – and is also active at OCG, GI, CEPIS, IAAIL, FALM and ICANN, where he is now a member of the EURALO board and the CCWG Accountability.

**09:40 – 16:20: Workshops (incl. lunch break)**

#### **Overview of workshops and rooms**

09:40 – 11:00	Future document assembly TC 5.13	Secure systems; Coding 101 TC 5.03	Algorithmic Decisions TC 5.01
11:10 – 12:30	Modern search techniques TC 5.13	Contract management TC 5.03	Automated Reasoning TC 5.01
12:30 – 13:30	Lunch Break (Mensa)		
13:30 – 14:50	Modern search techniques TC 5.13	Contract management TC 5.03	Automated Reasoning TC 5.01
15:00 – 16:20	Modern search techniques TC 5.13	Contract management TC 5.03	Automated Reasoning TC 5.01

Please bring your laptop or tablet to the sessions. Many of them will be interactive any you will benefit the most if you work with the workshop leaders.

## ***WORKSHOP: Document assembly of the future***

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### **Abstract**

We've all heard about document automation and most of us have probably tested one or another tool. But creating standard documents and individualising them with certain names and dates is not the end of the ladder. We'll explore the future of document automation and learn where it is headed; with interesting new features, e.g. intelligent anonymisation of sensitive documents – which goes far beyond blackening a name or address.

### **About the workshop leader**

**Matthias Lichtenthaler (PMP)** serves as the Head of Digital Government & Innovation of the Federal Computing Center of Austria. He leads the key activities to execute a holistic Digital Transformation approach for the public sector in Austria. He coordinates various Initiatives as part of the Digital Roadmap for Austria – including Public Private Partnership Solutions bridging between Public and Private Sector.

During many years of project management in the area of Project, Document & Data Management he developed extensive experience in Capital Project Management, Content Analytics and Process Automation.

Currently he works with a certain focus on adapting latest technology trends like AI and Blockchain for the public sector. Altogether he can reflect upon 18 years' experience within IT Management. Previously he led the Digital Business at Accenture in Austria.



## ***WORKSHOP: Secure systems?***

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### **Abstract**

The spread of computers and the internet also has its dark side: it increases a company's risk to be hacked. In this workshop we'll learn how easy it is to break into a computer system. Are you sure that your company's IT systems are secure? Believe us: there is always room for improvement and maybe – after you watched our experts hack into a system – you'll decide to revisit some of your security defences.

### **About the workshop leader**

**Edgar Weippl** is Director of the research institute SBA Research and Associate Professor and head of a CD Laboratory at the Technical University of Vienna. His research focuses on secure software development and empirical research in information security. Edgar Weippl, among other things, organises the international ARES Conference, was Chair of the ACM CCS 2016 and is a member of the editorial board of the oldest security journal "Computers & Security (COSE)".

After he graduated from the doctoral programme in Computer Science at the Technical University of Vienna, Edgar Weippl worked for two years in a successful tech start-up. His next career step was a one-year teaching and research assignment in Beloit, WI, USA. During his employment with the software producer ISIS Papyrus Edgar Weippl was consultant for health and finance companies domiciled in the USA and in Germany.

In 2004, he returned to the Institute for Software Technology and Interactive Systems of the Vienna Technical University and founded the research institute SBA Research together with Markus Klemen and Prof. A Min Tjoa.





## ***WORKSHOP: Coding 101***

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### **Abstract**

We'll learn about some tools that may help you to better understand the principles of coding that every legal practitioner should know. At the end of the session you'll know how to create your own – very basic – programme. But more importantly, you'll have gained some knowledge about the coding process that allows you to better understand and communicate with your software developers.

### **About the workshop leader**

**Stefan Eder** (please see above for his bio).

## ***WORKSHOP: Algorithmic Decision Making (ADM)***

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### **Abstract**

We'll hear about a novel approach building on eXplainable Artificial Intelligence (XAI). Algorithms can be a huge benefit to the decision-making process whenever large amounts of data need to be taken into consideration. However, most of us feel a bit uncomfortable when we know that a decision was taken by AI, perhaps even without human intervention. Largely because we don't understand the mechanism. The SAGES explanatory model might be a solution: generic enough to work on any interface/system and powerful enough to allow all possible types of explanation.

### **About the workshop leader**

**Francesco Sovrano** currently works at the Department of Computer Science and Engineering DISI, University of Bologna. He has a PhD in Data Science & Computation and a Master's Degree in Computer Science.

Mr. Sovrano does research in machine learning, artificial intelligence and parallel algorithms, human-computer interaction and software engineering. He has also skills in deep reinforcement learning and game design.



## ***WORKSHOP: Modern search techniques and knowledge representation***

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### **Abstract**

We'll hear about new algorithms which help to retrieve relevant information from an ever-increasing body of legal texts and we'll see how they are put into practice. Accurate and timely information is essential for every practitioner and indeed every citizen. But the sheer amount of available texts makes it impossible to find the required information quickly, read it in the right context and understand its true meaning. The new tools can help you to lift the fog.

### **About the workshop leaders**

**Andreas Geyrecker** has more than 15 years of experience in professional information solutions in the legal domain. He is leading the LexisNexis product management organization in Austria, dedicated to user driven product development and innovative digital product initiatives like legal tech solutions and legal research solutions. Andreas Geyrecker holds a Master degree from the Vienna University of Economics and Business (WU). He is a regular speaker at various legal tech events and workshops.



**Günther Schefbeck** is Head of the Austrian Parliament's Executive Department for Parliamentary Research. He is a member of the ManyLaws team, a project that seeks to increase the accessibility of legal information by offering innovative services. He has published a number of expert papers and has moderated panels and given presentations at many legal informatics conferences.

**Shefali Virkar** is a Senior Research Associate at the Department for E-Governance and Administration at the Danube University Krems (Austria), specialising in the theory and practice of digital government. In particular, she studies the political, social, and economic implications of the new Information and Communications Technologies (ICT), and how these developments impact traditional forms of work and governance structures. She is currently project leader for ManyLaws – EU-Wide Legal Text Mining Using Big Data Infrastructures. Shefali holds a D.Phil. (Ph.D.) in Politics from the University of Oxford (UK), where her doctoral research focused on the impact that the perceptions and behaviour of political actors involved on strategic ICT projects in bureaucracies have on the ultimate outcome of such initiatives through an in-depth examination of a case study based in India.



### ***WORKSHOP: Analysis of contract language to assist automated contract management and monitoring of laws for compliance and similar purposes***

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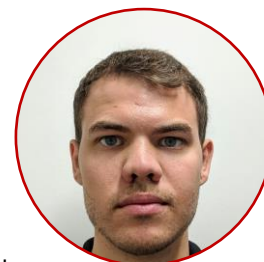
#### **Abstract**

We'll see practical applications which build on semantic analysis of legal texts. Once a standardisable legal text – such as general terms and conditions or contracts– is annotated and the relevant knowledge is stored in a database, the tools under development can assist with compliance obligations and with checking and monitoring the validity of contract clauses.

#### **About the workshop leaders**

**Daniel Braun** has been a research associate at the chair of Software Engineering for Business Information Systems (sebis) at the Technische Universität München since May 2016.

Before he joined TU Munich, he majored in informatics and minored in computer linguistics at the University of Saarland and the University of Aberdeen, where he was also a research student and scholar of the Friedrich Naumann Foundation supervised by Prof Ehud Reiter. His research focuses on natural language processing and generation, conversational interfaces and legal tech.



**Christian Sageder** is co-founder and managing director of openlaws gmbh. He has obtained his degree in computer science (Johannes Kepler University Linz). Before starting openlaws, he has been working for international IT companies, including Sony, SKIDATA, T-Mobile UK and Jamba.

He has 20 years' experience in computer science. He has managed multiple international mobile and web projects on European level - from first research through trials and market research until final product launch. He has obtained knowledge in natural language processing and artificial intelligence. He has deep knowledge in product management and gathering of requirement.



**Prof. Florian Matthes** (please see above for his bio)

## *WORKSHOP: Automated reasoning on legal texts*

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### Abstract

We'll use the so-called NAI tool, a project led by the University of Luxembourg, to see how artificial intelligence can assist legal reasoning. All you need is the web browser of your laptop or tablet. The tool consists of an editor allowing you to input your interpretation of a legal text and an engine which allows you to check the consistency and independency of your interpretation, to reason automatically and to deduce consequences.

### About the workshop leaders

**Tomer Libal** is an assistant professor in the American University of Paris and was previously a postdoc in Inria, Microsoft Research and Ecole Polytechnique. His main interests are in automated deduction, proof certification and their applications, especially to the legal domain.



He has led the development of the GAPT proof theory framework and the Checkers proof certifier and contributed to the implementations of the TLA+ proof assistant, among others. More recently, he has been working on the theoretical foundations and implementation of the NAI normative reasoner, an editor and a set of reasoning tools for the legal domain.

**Tereza Novotná** is a PhD candidate at the Institute of Law and Technology of Masaryk University in Brno, Czech Republic.

Her research focuses on legal informatics, artificial intelligence, network analysis, automatic processing of legal texts, machine learning, natural language processing, deontic logic in law and automatic legal reasoning.



### 16:20 – 17:00: Wrap up

*Stefan Eder, Conference Chair*

After a – hopefully – interesting and instructive day we will wrap up the conference and summarise the most important outcome.

## Need to know

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