# Programme: Future-proofing the City workshop, University of Helsinki, The Legal Tech Lab (LTL), 26. August 2022

### **Contents**

Schedule	2
Participant list and bio	3
Participant list and bio  Mini-abstracts  Session 1: Gaps in the current regulatory HR Framework  Session 2: Temporal dimensions of human rights in the smart city  Session 3: International approaches to addressing surveillance	9
Session 1: Gaps in the current regulatory HR Framework	9
Session 2: Temporal dimensions of human rights in the smart city	10
Session 3: International approaches to addressing surveillance	11
Session 4: HR-aligned smart city development and procurement	12

### Schedule

Location: Online & the main building of the University of Helsinki, Unioninkatu 34, room U3032					
Time, EET, UTC+2	Theme	Speaker	Presentation	Critical friend	
10:00-10:20	Introduction Legal Tech Lab	Suvi Sankari			
	Introduction Special Issue	Alina Wernick & Anna Artyushina			
10:25-10:55		Beatriz Botero Arcila	After Human Rights for the Smart City: An Inquiry	Julia	
10:55-11:25	Gaps in the current regulatory HR Framework.	Dhiraj Nainani	Smart cities, smarter sewers: the right to group privacy, data ethics, and the governance and regulation of wastewater-based surveillance technology	Beatriz	
11:25-11:55	Session chair: Susanna Lindroos-Hovinheimo	Julia Iunes	A societal approach to the governance and regulation of artificial intelligence in cities: using the lens of data feminism to bridge the gap in democratic participation	Dhiraj	
11:55 - 12.10	COFFEE BREAK				
12.10 -12:40		Lottie Lane	Snapshots and Silhouettes: Corporate human rights responsibility for smart city AI systems	Mariana	
12:40 -13:10	_	Philipp Hacker & Jürgen Neyer	Temporalities of Law and Politics: Dynamic Rights Protection in Smart City Contexts	Lottie	
13:10-13:40	<b>city.</b> Session chair: Suvi Sankari	Mariana Canto	Scotland as an overlooked anticipatory approach? The oversight of emerging technologies in policing for safeguarding human rights and securing public trust	Philipp / Jürgen	
13:30 - 15:00	LUNCH Restaurant SUNN				
15:00-15:30	International approaches to addressing	Joss Wright, Valentin Weber & Gregory Walton	(Re)Inventing the Future: Metaveillance, Temporal Feedback Loops, & the Chinese Smart City	Giuseppe	
15:30-16:00	surveillance.  Session chair: Bruna de	André Ramiro & Luã Fergus	The gray-zones of public-private surveillance: policy tendencies of facial recognition for public security in Brazilian cities	Joss / Valentin / Greg	
16:00-16:30	Castro e Silva	Giuseppe Mobilio	Your face is not new to me: the surveillance power of facial recognition technologies	André / Luã	
16:30 - 17:00	COFFEE BREAK				
17:00-17:30	HR-aligned smart city development and	Tracey Lauriault	Assembling Open Smart Cities in Canada: An approach to governing emerging digital twins?	Brett / Madelyn	
17:30-18:00	procurement.	Brett Frischmann & Madelyn Sanfilippo	Human-Centered Decision-Making for Smart Cities	Alina	
18:00-18:30	Session chair: Johanna Ylipulli	Alina Wernick, Emeline Banzuzi & Alexander Wulff	Do smart city technology developers dream of GDPR-free countries?	Tracey	
18:30-18:40	Event closure	Alina Wernick & Anna Artyushina			
19:00	DINNER Restaurant Shelter				

### Participant list and bio

### **Alexander Wulff**

He is a research assistant at Legal Tech Lab of University of Helsinki, Finland. He has a background in Sociology (B.sc.) and Economic History (M.sc.), both from Lund University, Sweden.

### Alina Wernick

She is a Dr. with a background in IP Law and is the PI of the project "Smart City Technology and Long-term Human Rights Risks" at the Legal Tech Lab at University of Helsinki, Finland. Interested in the regulation of surveillance technology.

### **Anna Artyushina**

She is Research Fellow in Data Governance and a Ph.D. candidate in Science & Technology Studies at York University, Canada.

### **André Ramiro**

He holds a M.Sc. in Computer Science and is Director of the Law and Technology Research Institute of Recife (Brazil). He works with research and advocacy towards privacy and data protection policy. His disciplinary background is Law, public policy regarding privacy and data protection regulation, and secrecy of communications. His research interests include encryption, government hacking, facial recognition, and civil society participation.

#### **Beatriz Botero Arcila**

She is Assistant Professor at Sciences Po Law School where she researches data governance, urban tech governance, surveillance and remains interest in legal theory. She also founded a think and do tank focused on surveillance in cities, and remains involved. Her disciplinary background is in law, though music was once upon a time also part of the picture. She is also a faculty associate at the Berkman Klein Center for Internet & Society at Harvard University.

### **Brett Frischmann**

He is Charles Widger Endowed University Professor in Law, Business and Economics, works at Villanova University, where he teaches interdisciplinary courses and conducts research in multiple fields, often with really incredible co-authors.

### Bruna de Castro e Silva

She is a Ph.D. researcher in Law and Technology at the Faculty of Management and Business at Tampere University, Finland. Responsible AI Lead at Women in AI Finland.

### **Dhiraj Nainani**

He is a Research Fellow at the Singapore Centre for Environmental Life Sciences Engineering (SCELSE) at Nanyang Technological University where he researches the socio- and spatio-legal aspects of public health surveillance, especially wastewater surveillance. His disciplinary background is in law and geography, and he is especially interested in the intersection of legal materiality, urban space, and power.

#### **Emeline Banzuzi**

She is a Ph.D. researcher at the Legal Tech Lab at University of Helsinki, Finland. Working on smart cities and human rights, with an interest in non-discrimination and the ethical use of AI for public safety initiatives.

### **Giuseppe Mobilio**

He is Assistant Professor at the University of Florence, Italy, where he is a researcher in Constitutional Law at the Department of Juridical Science. His current research interests include biometric surveillance, regulation and protection of fundamental rights. More broadly, his research strands also encompass constitutional justice, dynamics of forms of governments, sources of law, territorial government and metropolitan authorities.

### **Gregory Walton**

He is Senior Research Associate for Cyber Security, Smart Cities, and Data Analytics at the SecDev Group (Canada). His disciplinary background is in International Relations and Cybersecurity.

### Luã Fergus

He is a master's student in Science Communication at the State University of Campinas (Unicamp) and Researcher at the Brazilian Institute for Consumer Protection (Idec). Luã is an analyst with experience in Internet policy and advocacy, working on public interest research that addresses the advancement of public and private services that violate citizens' digital rights. His main areas of research include science and technology studies, access to public information and critical data studies.

### Julia Iunes

She is a doctoral candidate in Law at the Pontifical Catholic University of Rio de Janeiro, and visiting researcher at the Humboldt University of Berlin, supported by a CAPES scholarship. She conducts research on digital law, focussing on civic participation (crowdlaw), technological sovereignty, AI, and platform regulation. At the moment, she is working on a Democratic Approach to the regulation of AI in cities. She has a Master's degree in Public Law from the State University of Rio de Janeiro (UERJ) and a Bachelor's Law degree from the Federal University of Rio de Janeiro (UFRJ). She is a member of the Research Group Legalite (PUC-Rio). In the last few years, she worked as a researcher at the Center for Technology and Society (CTS) of Getulio Vargas Foundation (FGV) and the Institute for Technology and Society (ITS-Rio), both in Rio de Janeiro, Brazil.

### Jürgen Neyer

He is Professor and chair for European and International Politics at the European University Viadrina, Frankfurt (Oder). He has been a research fellow at the Johann-Wolfgang-Goethe University in Frankfurt/ Main, the University of Bremen, the Max-Planck-Institute for Research on Collective Goods in Bonn, the European University Institute in Florence, the University of Berkeley at California and enjoyed a Humboldt stipend by the DFG and an Opus Magnum grant of the Volkswagen-Stiftung. He has also served as a visiting professor at the Universities of Haifa, Israel and Ottawa, Canada. His current research focuses on the use of AI/ ML for analysing processes of learning between international politics and International Relations.

### Johanna Ylipulli

She is Academy of Finland Research Fellow at the University of Aalto, at the department of computer science, where she leads the project Digital Inequality in Smart Cities (DISC) 2020-2025. Her background is in cultural anthropology but she prefers to call herself a design anthropologist. Her interests revolves around urban digitalization, emerging technologies and participatory and speculative approaches to design.

### **Joss Wright**

He is Senior Research Fellow at the Oxford Internet Institute, Co-Director of the Oxford EPSRC Cybersecurity Doctoral Training Centre, Co-Director of the Oxford Martin Programme on the Illegal Wildlife Trade, and an Alan Turing Fellow. His work focuses on computational approaches to social science questions, with a particular focus on technologies that exert, resist, or subvert control over information.

### **Lottie Lane**

She is Assistant Professor of Public International Law at the University of Groningen, where she researches the human rights responsibilities of businesses developing and deploying AI at international, regional and national levels. Lottie is also Senior Advisor on AI and Human Rights at Slimmer AI, an AI venture studio based in the Netherlands. Her disciplinary background is international human rights law and governance (and business and human rights more specifically) as well as European human and fundamental rights.

### **Madelyn Sanfilippo**

She (Dr.) is Assistant Professor of Information Sciences at the University of Illinois at Urbana-Champaign where she researches privacy and governance in sociotechnical systems. Her teaching focuses on mixed method research design, social aspects of information technology, and data governance.

### **Mariana Canto**

She is a researcher at the Research Institute of Recife and master's student in Science and Technology in Society at the University of Edinburgh. Graduated in Law from The Federal University of Pernambuco in Recife, Brazil. She researches on topics in the areas of privacy and

surveillance, and multisectorism and popular participation. She is also interested in the study of regulation of algorithms as well as its influence on asymmetric power relations.

### **Philipp Hacker**

He (Prof. Dr., LL.M. [Yale]) holds the Chair for Law and Ethics of the Digital Society at the European New School of Digital Studies (ENS), at European University Viadrina Frankfurt (Oder). Prior to joining ENS, he served as an AXA Postdoctoral Fellow at the Faculty of Law of Humboldt University of Berlin; a Max Weber Fellow at the European University Institute, and an A.SK Fellow at WZB Berlin Social Science Center. His research focuses on the intersection of law and technology. In particular, he analyzes the impact of tracking technologies, Artificial Intelligence, and the Internet of Things on consumer, privacy, and anti-discrimination law. He often cooperates with computer scientists and mathematicians, especially on questions of explainable AI and algorithmic fairness.

### Susanna Lindroos-Hovinheimo

She (LL.D., M.Soc.Sc.) is Professor of Public Law at the Faculty of Law of University of Helsinki, Finland. In her current research, she focuses on the jurisprudence of EU privacy law.

### Suvi Sankari

She (LL.D.) is Adjunct Professor of European Law and research coordinator at the Legal Tech Lab of University of Helsinki, Finland. She is also affiliated member of the Helsinki Institute of Sustainability Science (HELSUS), project director for Legal Theory for The Inter Tran Research Group for Sustainable Law and Business, and founding member and chair of the Nordic Network of Legal Empirical Scholars (NoLesLaw).

### **Tracey Lauriault**

She is Associate Professor in Critical Media and Big Data at the School of Journalism and Communications, Faculty of Public Affairs and Cross Appointed to Digital Humanities, and is board member of the Institute for Data Science at Carleton University in Ottawa, Ontario, Canada. Her ongoing work on open data, open government, big data, smart cities, and data preservation is international, transdisciplinary, and multi-sectoral. Her current research interests are in digital twins, data brokers, Indigenous data, disaggregated equity data and data governance. Lauriault is one of the founders of the field critical data studies, open data and Open Smart Cities, AI & trust where she takes a data and technology governance approach to the shaping of large complex systems. As a publicly engaged scholar, she mobilizes her research into data and technology policy

across sectors. As a data and technological citizen, she examines large and small data and technology systems with the hope of making them more just, inclusive, equitable and environmentally sustainable.

### **Valentin Weber**

He is a Research Fellow in The German Council on Foreign Relations' Technology and Global Affairs Program. His research covers the emergence of cyber norms, the geopolitics of cyberspace, advanced surveillance technologies, and, more broadly, the intersection between cyber and national security.

### Mini-abstracts

# Session 1: Gaps in the current regulatory HR Framework After Human Rights for the Smart City: An Inquiry

### Beatriz Botero Arcila

Smart city technologies, like all algorithmic and biometric technologies need human rights. But just human rights may not be enough. This presentation will present a friendly critique to the indeterminacy of rights for the smart city and propose a movement towards clearer legal rules.

# Smart cities, smarter sewers: the right to group privacy, data ethics, and the governance and regulation of wastewater-based surveillance technology

### Dhiraj Nainani

This paper looks at wastewater surveillance systems in the European Union and Singapore, and explores how (if at all) a human rights-based approach can be used to strike an adequate balance between public health and group privacy.

# A societal approach to the governance and regulation of artificial intelligence in cities: using the lens of data feminism to bridge the gap in democratic participation

### Julia Iunes

The paper places the fields of data feminism and smart cities in conversation to highlight the need to approach AI regulation and governance from a contextualized societal perspective. It calls for principles such as political pluralism, social representativeness, and democratic participation, which are generally neglected by current ethical regulations. By highlighting the importance of these principles, the paper aims to contribute to a democratic approach for AI regulation in the cities, comitted to social justice.

# Session 2: Temporal dimensions of human rights in the smart city

Snapshots and Silhouettes: Corporate human rights responsibility for smart city AI systems

### Lottie Lane

Despite growing awareness of its potential interference with human rights, we currently only have a snapshot of the true scale and long-term human rights risks posed by the private development and use of AI systems in smart city technologies. Similarly, we have only a vague silhouette of the human rights responsibilities of the private businesses involved, with the uncertainty of future technological developments and uses in the smart city context exacerbating levels of regulatory uncertainty. This article seeks to fill in and build on the silhouette, bringing into focus the picture of the current state of affairs vis-à-vis corporate human rights responsibility for smart city AI systems. Not only is this clarity crucial for the private businesses involved, but it also paves the way for a clearer understanding of regulatory needs moving forward.

### Temporalities of Law and Politics: Dynamic Rights Protection in Smart City Contexts

### Philipp Hacker & Jürgen Neyer

This paper explores the ways in which regulatory techniques, innovative political practices and novel laws seek, manage, or fail, to accommodate technological change brought about by time's passage. In doing so, it focuses on the mechanisms for internalizing temporality in politically motivated, digitally networked action, and on three legal domains particularly relevant for human rights protection and AI regulation in the EU: the GDPR, nondiscrimination law, and the Artificial Intelligence Act (AIA) proposed in April 2021.

# Scotland as an overlooked anticipatory approach? The oversight of emerging technologies in policing for safeguarding human rights and securing public trust

### Mariana Canto

The presentation (1) reviews the literature surrounding social, political, and legal aspects of policing and surveillance; (2) present findings related to current investments and frameworks of policing technologies in Scotland; (3) and finally, contribute to the current international debate regarding necessary reforms to improve the oversight of emerging technologies in policing for safeguarding human rights and securing public trust.

# Session 3: International approaches to addressing surveillance

### (Re)Inventing the Future: Metaveillance, Temporal Feedback Loops, & the Chinese Smart City

Joss Wright, Valentin Weber & Gregory Walton

In this work, we investigate potential and emerging human rights impacts of smart city technologies primarily through an examination of trends in patent filing. We apply machine learning methods both to explore the increasing rates of patent filing globally for smart city technologies, and also to identify the emerging topics on which companies are choosing to focus their efforts.

### The gray-zones of public-private surveillance: policy tendencies of facial recognition for public security in Brazilian cities

### André Ramiro & Luã Fergus

The presentation intends to shine a light in some policy tendencies in order to: (i) identify the narrative's particularities of public-private models regarding, taking into account account the Brazilian socio-economic context; (ii) map the current human rights' organizations public reactions to the use of FRT for public security; and (iii) provide a set of resilient principles, based on Brazilian and Latin American legal frameworks, that must guide biometric surveillance policies at the city level.

# Your face is not new to me: the surveillance power of facial recognition technologies

### Giuseppe Mobilio

The article focuses on facial recognition technologies and, in particular, their "real-time" and "live" use by law enforcement authorities. The article wonders whether, and to what extent, it is possible to regulate the resulting outstanding surveillance power in the hands of the police, considering the risks for fundamental rights and the ethical, technical and societal concerns. The attention moves from the perspective of data protection regulation, underlining points of strength and shortcomings. The analysis of the existing regulation leads to the explication of four regulatory demands, which will be considered as a benchmark for evaluating the proposal of AI Act, its step forward and its weakness.

# Session 4: HR-aligned smart city development and procurement

# Assembling Open Smart Cities in Canada: An approach to governing emerging digital twins?

### Tracey Lauriault

Digital twins may be considered as component of and/or an extension of a smart city, and as spatial data infrastructure. How might we future proof the city from the potential negative applications and consequences of digital twins, and benefit from their potential to solve some of our most pressing problems? It is argued that we must now keep sight of digital twins which afford modelling, simulation, and VR opportunities to inform the mitigation of climate change, create more sustainable supply chains for the construction sectors, and for more efficient built environment operations, the corollary of which, these could also be very large, closed, opaque, privatized surveillance apparati. Is the Open Smart City approach a possible approach to govern these large and complex systems?

### **Human-Centered Decision-Making for Smart Cities**

### Brett Frischmann & Madelyn Sanfilippo

Cities must develop appropriate governance of data collection and smart systems to protect human rights. This paper evaluates a set of questions to guide decision-making grounded in the Governing Knowledge Commons (GKC) framework through a series of case studies, demonstrating the validity of the approach and the contextual variation in values prioritized. We argue that such an approach adapts to local norms and that by asking key questions throughout smart city planning, procurement, implementation, and management processes, human rights, interests, and expectations are respected.

### Do smart city technology developers dream of GDPR-free countries?

### Alina Wernick, Emeline Banzuzi & Alexander Wulff

We aim to analyse whether there is disjuncture between smart city innovation policy and European GDPR principles. Our qualitative study from Finland reveals that several features in the R&D funding landscape drive companies to pursue smart city markets outside EU with lower protection of personal data. We discuss the accountability for human rights compliance of such exported technology.