

Conference Program
dg.o 2021:
22nd Annual International Conference on Digital Government Research

**Digital Innovations for Public Values:
 Inclusive Collaboration and Community**
 College of Public Affairs and Community Service
 University of Nebraska at Omaha
 Omaha, Nebraska
 June 9-11, 2021

Conference Website: <http://dgsociety.org/dgo-2021/>

Pre-conference events

U.S. Central Time	Monday, June 7, 2021		Tuesday, June 8, 2021	
	Room 1		Room 1	Room 2
7.30 - 8.00 AM	Doctoral Colloquium			
8.00 - 9.00 AM			Workshop 1: dg.o 2022: Opportunities and Risks in Intelligent Governance and Smart City	Tutorial 1: From A desk to Lecture Hall: A Tutorial on Virtual e-Gov and e-Part Event Delivery
9.00 - 10.00 AM			DGS Board Meeting (Board members only)	
10.00 - 11.00 AM				
11.00 - 12.00 AM				
12.00 - 1.00 PM				

Overview of live sessions

U.S. Central Time	Wednesday, June 09, 2021		
	Room 1	Room 2	Room 3
7.00 - 8.00 AM	TRACK 5: Security and AI Ethics for the Next Wave of Data-driven Society	TRACK 8: Collaborative Intelligence: Humans, Crowds, and Machines	
8.00 - 9.00 AM	Welcome & local Keynote by Derek Kruse <i>Chair: Yu-Che Chen</i>		
9.00 - 10.00 AM	Welcome reception - Group picture		
10.00 - 10.30 AM	PANEL 1: Publishing Research in Digital Government	TRACK 1: AI and Algorithms for Future Governments	TRACK 3: Digital Sovereignty in the Era of Smart Cities
10.30 - 11.00 AM			TRACK 6: Beyond Bureaucracy
11.00 - 11.15 AM	Break		
11.15 - 12.15	PANEL 2: VR-Dialogue - The AI-powered e-Participation Research Expedition	TRACK 1: AI and Algorithms for Future Governments	TRACK 2: Social Media and Government

U.S. Central Time	Thursday, June 10, 2021		
	Room 1	Room 2	Room 3
7.00 - 8.00 AM	PANEL 3: Cyber-physical innovations: Cyber-infrastructure for research, cyber-physical architecture for real-time applications, autonomous vehicle (AV) governance and AI artefacts for public value		
8.00 - 9.00 AM	International Keynote by Dr. Nitesh Bharosa and Giulietta Marani <i>Chair: Marijn Janssen</i>		
9.00 - 10.00 AM	Poster session <i>Chair: Sungsoo Hwang</i>		
10.00 - 10.30 AM	PANEL 4: Global Intelligent Governance — A Collaborative Platform	TRACK 4: Opening Government	TRACK 12: Automation of Public Services
10.30 - 11.00 AM			TRACK 13: Digital Government and Sustainable Development Goals
11.00 - 11.15 AM	Break		
11.15 - 12.15	PANEL 5: National Strategies and Policies of IA. Models, Priorities and Governance	TRACK 4: Opening Government	TRACK 7: Inclusive and Resilient Smart Cities

U.S. Central Time	Friday, June 11, 2021		
	Room 1	Room 2	Room 3
7.00 - 8.00 AM	TRACK 10: Organizational Factors, Adoption Issues and Digital Government Impacts	TRACK 11: Cyber-physical Innovations for Public Policy and Service	
8.00 - 9.00 AM	Award ceremony & Keynote by the Award Fellows <i>Chairs: Luis F. Luna-Reyes and Yu-Che Chen</i>		
9.00 - 10.00 AM	DGS membership meeting <i>Chair: Luis F. Luna-Reyes</i>		
10.00 - 10.30 AM	Panel 6: Open Government and Open Data in Times of COVID-19	TRACK 9: Digital Transformation in Subnational Governments	TRACK 15: Legal Informatics
10.30 - 11.00 AM			TRACK 14: Blockchain-based applications for e-Government
11.00 - 11.15 AM	Break		
11.15 - 12.15	Networking and mentoring session <i>Chair: Gabriela Viale Pereira</i>		

Time Zones Reference

U.S. Central Time	CEST	CST
7.00 - 8.00 AM	14.00 - 15.00	20.00 - 21.00
8.00 - 9.00 AM	15.00 - 16.00	21.00 - 22.00
9.00 - 10.00 AM	16.00 - 17.00	22.00 - 23.00
10.00 - 11.00 AM	17.00 - 18.00	23.00 - 00.00
11.00 - 12.00	18.00 - 19.00	00.00 - 01.00

WELCOME & LOCAL KEYNOTE

Presenter: Derek Kruse, Chief Information Officer for the Douglas Omaha Technology Commission (DOTComm)

Presentation Title: Think Digitally, Act Locally: Start Your Engines!

Chair: Yu-Che Chen

Abstract: For local governments, it is often challenging to secure the resources and expertise needed to tackle citizen requirements in a crisis. It is even more difficult to proactively predict those needs and be prepared for the challenges they present. Within the context of our conference theme, "Digital Innovations for Public Values: Inclusive Collaboration and Community," this presentation highlights three areas of focus that can help communities proactively meet citizens where they are by concentrating on the value of digital innovation at the local level. 1) Your digital partners are already here - by focusing on partnerships with established global providers, local communities can harness the power of the global digital engine. 2) Your digital transformation relies on infrastructure - to properly utilize the power of the global digital engine, public/private infrastructure partnerships at the local level are a foundational need. 3) Your digital output is more valuable than you think - as communities think digitally and act locally, they can produce information that will exponentially improve not only their own performance, but will feed the power of the global digital engine. This reflection on three key areas of digital focus for local communities provides not only a blueprint for meeting citizen needs, but also lays out a research agenda for academic pursuit by those interested in enabling digital collaboration.

Biography: Derek Kruse, DBA, serves as the Chief Information Officer for the Douglas Omaha Technology Commission (DOTComm). DOTComm provides technical support and consulting to more than 70 governmental entities in Omaha and Douglas County. Dr. Kruse is responsible for driving operational IT excellence, delivering financial transparency and aligning IT strategy across city and county business objectives. He has over 20 years of business experience across multiple disciplines with a focus on process improvement, technology enablement, leadership and innovation. He formerly served as Global Process Integration Manager and Division CIO at IBM. He is also an instructor at Creighton University in the field of strategy. His research focuses on corporate social responsibility. He speaks regularly on strategy, technology enablement and community advancement through public/private partnerships. He holds a Bachelor's degree from Cornell University where he played varsity basketball for four years, an MBA from Emory's Goizueta Business School and a DBA from Creighton's Heider College of Business. He also serves on the board of the Cystic Fibrosis Foundation of Nebraska and on the AIM board, which seeks to advance technology awareness in Nebraska. Derek, his wife Dana, and their two children are native Cornhuskers and live in Bennington, NE.

INTERNATIONAL KEYNOTE

Presenters

Dr. Nitesh Bharosa, Professor of GovTech and Digital Government Innovation Ecosystems

Giulietta Marani, Program Director of Digicampus

Presentation Title: The rise of GovTech, shaping the next generation of digital public services together

Chair: Marijn Janssen

Abstract: Across the globe, the number of GovTech providers is rising. GovTech refers to developing data-driven digital solutions in public service delivery based on emerging information technologies. More than 400 startups and scaleups in the Netherlands alone are looking for ways to launch their solutions. And due to the harmonization in European policies and regulations, cross-border services are on the horizon. Examples include commercially issued eIDS and personal data wallets for data exchange during various live events and AI assistants for public servants responsible for handing citizen's applications. However, while more and more public agencies recognize the potential of GovTech solutions, there are several barriers to the acceptance of GovTech solutions in public service delivery. Barriers span the areas of technology design, institutional design, and collaboration process design, ranging from a lack of interoperability and untransparent business models to an institutional void when regulating the use of public agency data GovTech providers. Moreover, the black-box nature of GovTech in public service delivery brings serious legitimacy concerns (e.g., on how data is collected and processed, who is responsible), amplifying the knowledge gap between government and market. This keynote provides how Digicampus – a quadruple helix partnership for mission-driven public service innovation – embraces GovTech. The Digicampus missions, research agenda, cases, and collaboration methods can inspire those looking to develop a GovTech strategy.

Biography:

Dr. Nitesh Bharosa is Professor of GovTech and Digital Government Innovation Ecosystems at Delft University of Technology and Research Coordinator at Digicampus. He is responsible for coordinating GovTech research, education, and valorization at Digicampus. He has over 10 years of business R&D experience across multiple disciplines, focusing on digital infrastructures, digital transformation, and public-private innovation. His research focuses on the development of responsible GovTech solutions and GovTech engagement frameworks for public agencies.

Giulietta Marani is Program Director of Digicampus and Program Manager Discipl at ICTU. She is responsible for the strategic direction of the triple/quadruple helix for digital public innovation, called Digicampus, connecting public agencies, businesses, knowledge institutes, and citizen groups. She is furthermore responsible for the open source innovation portfolio and open source ecosystem Discipl, a DISTRibuted Collaborative Information platform based on collaboration, sharing and reusing data. She has a track record on public service innovation programs and is an expert on innovative collaboration and public-private innovation.

AWARD CEREMONY & KEYNOTE BY THE AWARD FELLOWS

Chairs: Luis F. Luna-Reyes and Yu-Che Chen

PRE-CONFERENCE WORKSHOP AND TUTORIAL

Chairs: Loni Hagen and Changsoo Song

Workshop 1: dg.o 2022: Opportunities and Risks in Intelligent Governance and Smart City

Dongwook Kim, Wookjoon Sung, Choong-Sik Chung, Seok-Jin Eom, Loni Hagen, Sungsoo Hwang and Soon Ae Chun

With the advent of intelligent technologies such as AI-driven automations and IoT-based omni-sense intelligent society, it is imminent to identify the potentials and risks through research, development, and practices. The Center of Intelligent Society and Policy (CISP) at Seoul National University is a leading research center for studying the government's role and innovating policies for intelligent society and smart cities. In this workshop, we discuss the extensive research and development efforts in CISP and invite diverse background researchers to discuss and critically evaluate the potentials and the possible and unforeseen risks of the intelligent society. This workshop aims to identify the potential subtopic areas and sustainable factors for the next generation intelligent society as focal themes of dg.o 2022. We will briefly introduce the CISP, current research projects, and dg.o 2022 conference. We invite all interested scholars and practitioners and look forward to exchange ideas and take suggestions for collaboration and cooperation.

Tutorial 1: From A desk to Lecture Hall: A Tutorial on Virtual e-Gov and e-Part Event Delivery

Lukasz Porwol and Catherine Dumas

In this Tutorial, we are going to explore the full socio-technical pipeline required to delivering an online, Immersive VR e-Government & E-Participation event using state of the art Immersive Virtual Reality Technologies. In particular, we are going to elaborate upon the use of specific mainstream software and hardware solutions for serious events in the context of e-Government. We are going to provide a practical step by step guidelines and explore options that organizers can choose from to deliver an efficient and desired VR experience whether for research purposes or simply for delivering a highly-engaging, innovative eParticipation experience.

PANELS

Chairs: David Valle-Cruz and Wookjoon Sung

Panel 1: Publishing Research in Digital Government: A Discussion with Editors-in-Chief of Key Journals

Efthimios Tambouris, Yu-Che Chen, Soon Ae Chun, Marijn Janssen, Albert Meijer, Nripendra Rana and Anna Visvizi

Publishing research in reputable academic journals is an important objective for researchers in digital government, as in any scientific field. Researchers are under constant pressure to publish their work in highly reputable journals. As a result, a number of facts and myths exist regarding publishing in reputable digital government journals. The aim of this panel is to discuss prevalent facts and myths in an attempt to demystify publication of digital government research. For that purpose, editors-in-chief of five key journals in the area have been invited to provide guidance and answer relevant questions.

Panel 2: VR-Dialogue - The AI-powered e-Participation Research Expedition

Lukasz Porwol and Catherine Dumas

In our discussion panel, we are going to elaborate upon the novel research applying artificial intelligence and immersive virtual reality (VR) technologies to serious communication in the context of e-Participation behavioural research. We are going to present a research plan and preliminary results of specific EU-US research collaboration funded by the European Commission under The Next Generation Internet Explorers program on the topic of VR-Dialogue. The panel will gather researchers and experts directly involved in the research, approaching the problem from different perspectives.

Panel 3: Cyber-physical innovations: Cyber-infrastructure for research, cyber-physical architecture for real-time applications, autonomous vehicle (AV) governance and AI artefacts for public value

Michael Ahn, Chenyu Huang, Pei-Chi Huang, Xin Zhong, Johannes Himmelreich, Kevin Desouza and Richard Knepper

This panel explores the development of innovative, integrative, and versatile strategies to facilitate more practical and effective use of intelligent cyber-physical technologies from a variety of perspectives, including engineering, regulation, management, and research. With the same goal of sustaining the development of emerging technologies to best benefit our communities, this panel shares their different approaches in terms of engineering solutions for real-time controlling in cyber-physical systems, regulatory strategies to overcome the conflict between efficiency and autonomy, artifacts for artificial intelligence project management, and meeting researcher needs through largescale cyberinfrastructure. The selected cases discussed in this panel not only highlight the critical challenges in implementing cyber-physical technologies into real applications but also suggest promising strategies to overcome those issues from diverse facets.

Panel 4: Global Intelligent Governance—A Collaborative Platform

Sukumar Ganapati, Michael Ahn, Yu-Che Chen, Robert Krimmer, Gabriela Viale Pereira, Cristian Pliscoff, Hsien-Lee Tseng and Jiannan Wu

The purpose of this panel on “Global Intelligent Governance—A Collaborative Platform (GIG-CP)” is to discuss the feasibility and need for developing a collaborative platform to facilitate a global network-to-network collaboration of research in intelligent governance (IG). The discussion could provide a guide to establish the platform which will enable collaboration among international research networks. The platform will facilitate establishing common protocols for sharing high quality and high value open data. It would transform data-driven public engagement in collaborative decision making processes. There are three aims of the project: (i) to facilitate the development of research network collaboration; (ii) to enable the design of a global data hub, and (iii) to examine the IG skills required for the future workforce.

Panel 5: National Strategies and Policies of IA. Models, Priorities and Governance

Rodrigo Sandoval-Almazan, J. Ignacio Criado and Edgar Alejandro Ruvalcaba-Gomez

Artificial Intelligence (IA) in the public sector takes the lead for public innovation. The recent government innovation development across the globe are focused on this topic. Some countries like China, France, Germany, Spain launched strategies for the next five or ten years to promote the development of IA in their countries’ infrastructure, Human Resources, regulations, and ethics. This panel aims to understand the different strategies, their public policies, challenges and priorities, and the possible governance problems to be held.

Panel 6: Open Government and Open Data in Times of COVID-19

Loni Hagen, Rodrigo Sandoval-Almazán, Stephan Okhuijsen, Susana Cabaço, Edgar A. Ruvalcaba-Gómez, Julian Villodre, Wookjoon Sung and David Valle-Cruz

The Covid-19 pandemic happened when public administrations were convinced of the need to expose their data on open data portals. However, the global emergency that COVID-19 produced in governments highlighted some shortcomings in terms of public policies and strategies related to open data, open government, and open innovation. The aim of the open government and open data in times of COVID-19 panel is to discuss experiences and the potential consequences of open government and open data exploitation to combat the pandemic caused by the SARS-CoV-2 virus.

TRACK 1. Artificial Intelligence and Algorithms for Future Governments

Track Chairs: Sehl Mellouli, Marijn Janssen, Adegboyega Ojo

David Valle-Cruz, Asdrúbal López-Chau and Rodrigo Sandoval-Almazán - *How Much do Twitter Posts Affect Voters? Analysis of the Multi-emotional Charge with Affective Computing in Political Campaigns*

Matthew Young, Johannes Himmelreich, Sucheta Soundarajan and Danylo Honcharov - *The Right Tool for the Job? Assessing the Use of Artificial Intelligence for Identifying Administrative Errors*

Yongjin Choi, J. Ramon Gil-Garcia, Oguz Aranay, G. Brian Burke and Derek Werthmuller - *Using Artificial Intelligence Techniques for Evidence-Based Decision Making in Government: An Illustrative Example in Environmental Policy and some Reflections for the Future*

Loni Hagen, Teresa Harrison and Mary Falling - *Contributions of Data Science to Digital Government Research*

Farzana Yusuf, Shaoming Cheng, Sukumar Ganapati and Giri Narasimhan - *Causal Inference Methods and their Challenges: The Case of 311 Data*

Meghan Cook and Jeffrey Baez - *Informing a Statewide Investment: The NYS Voter Registration Data Pattern Detection Prototype Project*

Omar Ballester - *AI Classification for public sector applications*

Ingrid Palma, Marcelo Ladeira and Ana Carla Bittencourt Reis - *Machine Learning Predictive Model for the Passive Transparency at the Brazilian Ministry of Mines and Energy*

TRACK 2. Social Media and Government

Track Chairs: Andrea Kavanaugh, Rodrigo Sandoval-Almazan, and J. Ignacio Criado

Ahmed Anwar, Haider Ilyas, Ussama Yaqub and Salma Zaman - *Analyzing QAnon on Twitter in Context of US Elections 2020: Analysis of User Messages and Profiles Using VADER and BERT Topic modeling*

Tobias Polzer and Galina Goncharenko - *The UK COVID-19 App: Coproduction of Digital Public Services Which Went Wrong*

Yumeng Luo and Teresa M. Harrison - *Examining Daily Activities and Propaganda on Government Social Media in China: A Case Study of Weibo Usage by Beijing Police Department*

Azi Lev-On and Nili Steinfeld - *Municipal Campaigns on Facebook: What influences the scope of engagement and does it win votes?*

Rodrigo Sandoval-Almazan, Lizbeth Valle Gonzalez and Adrian Millan Vargas - *Barriers for Open Government implementation at municipal level: the case of the State of Mexico*



TRACK 3. Digital Sovereignty in the Era of Smart Cities

Track Chairs: Bettina Distel, Robert Krimmer, and Hendrik Scholta

Silvia Lips, Rozha K. Ahmed, Khayyam Zulfigarzada, Dirk Draheim and Robert Krimmer - *Digital Sovereignty and Participation in an Autocratic State: Designing an e-Petition System for Developing Countries*

TRACK 4. Opening Government: Open Data-driven Innovation and Collaboration for a better Public Value

Track Chairs: Fatemeh Ahmadi Zeleti and Grace Walsh

J. Ignacio Criado, Carlos Jimenez and Laura Alcaide-Muñoz - *Open Data Portals Development in City Councils. An Empirical Analysis based on Structural Factors in Spain*

Hongqin Li - *Research on the Development Path of Chinese Open Government Data in Innovation of Government Governance*

Jeongeun Seo, Beopyeon Kim and Hun Yeong Kwon - *Open Data Policies Analysis through Mediation Cases of Disputes over Provision of Public Data in the Republic of Korea: Based on OUR Data Index and ODB*

Iván Cantador, Jesús Viejo-Tardío, María E. Cortés-Cediel and Manuel Pedro Rodríguez Bolívar - *A Chatbot for Searching and Exploring Open Data: Implementation and Evaluation in E-Government*

Xiaoyi Yerden and Luis F. Luna-Reyes - *Promoting Government Impacts through Open Data: Key Influential Factors*

Mentor Geci and Csaba CsÁki - *BOLD in national budget planning – a comparison of international cases*

Shaoming Cheng, Sukumar Ganapati, Giri Narasimhan and Farzana Yusuf - *Understanding Equity in Public Service Coproduction through Machine Learning: An Analysis of 311 Service Requests of Miami-Dade County*

TRACK 5. Security and AI Ethics for the Next Wave of Data-driven Society

Track Chairs: Kwon Hun-Yeong, Kim Mi-Ryang, Ko Yoon-Seok

Michael P. Heinl, Simon Gölz and Christoph Bösch - *A Comparative Security Analysis of the German Federal Postal Voting Process*

Ji Hun Lim and Hun Yeong Kwon - *A Study on the Modeling of Major Factors for the Principles of AI Ethics*



TRACK 6. Beyond Bureaucracy: Participatory Online Politics and the Future of E-democracy

Track Chairs: Zach Bastick and Alois Paulin

Heike Vornhagen, Manel Zarrouk, Brian Davis and Karen Young - *Do city dashboards make sense? Conceptualising user experiences and challenges in using city dashboards. A case study*

Regula Hänggeli, Evangelos Pournaras and Dirk Helbing - *Human-centered Democratic Innovations with Digital and Participatory Elements*

TRACK 7. Inclusive and Resilient Smart Cities

Track Chairs: Leonidas Anthopoulos, Dongwook Kim, and Soon Ae Chun

Abeer Elahraf, Ayesha Afzal, Ahmed Akhtar, Basit Shafiq and Jaideep Vaidya - *A Service-oriented Framework for Developing Personalized Patient Care Plans for COVID-19*

Nitesh Bharosa, Bas Oude Luttighuis, Flori Spoelstra, Haiko van der Voort and Marijn Janssen - *Inclusion through proactive public services: findings from the Netherlands*

Xiaoyi Yerden, J. Ramon Gil-Garcia, Mila Gasco-Hernandez and G. Brian Burke - *The Role of Public Libraries in Developing Smart Cities and Communities: Comparing the Perspectives of Local Governments and Public Libraries*

James Geller and Soon Chun - *Inclusive Education Strategies for Diversity in Smart Workforce*

TRACK 8. Collaborative Intelligence: Humans, Crowds, and Machines

Track Chairs: Helen K. Liu, Benjamin Clark, and Lisa Schmidhuber

Hsien-Lee Tseng - *A Personal Data Innovative Government Digital Service in Taiwan – Study of MyData services*

Hsini Huang, Brian Pin-Hsuan Chang, Calvin Zhou-Peng Liao and Don-Yun Chen - *A matter of risk management: The effects of the innovation sandboxes on citizens' risk perceptions*

Mei Jen Hung, Chungpin Lee, Naiyi Hsiao and Cai-Rou Yang - *Data-Centric Collaborative Innovation to Address Social Problems: The Experience and Lessons of "Data for Social Good" Projects*

Wei-Min Fan and Muh-Chyun Tang - *A domain analysis of the literature citing National Longitudinal Study of Adolescent to Adult Health (Add-Health)*



TRACK 9. Digital Transformation in Subnational Governments

Track Chairs: Beatriz Barreto Brasileiro Lanza, Thiago José Tavares Ávila, and Maria Alexandra Cunha

Wenting Yang, Chuanshen Qin and Bo Fan - *Do Institutional Pressures Increase Computer-Mediated Transparency of Local Governments? A Field Experiment on an Online Request Platform in Shanghai*

Luiz Claudio Diogo Reis, Flavia Cristina Bernardini, Simone Bacellar Leal Ferreira and Claudia Cappelli - *ICT Governance in Brazilian Smart Cities: An Integrative Approach in the Context of Digital Transformation*

Frank Danielsen - *Digital transformation in Norwegian public organizations: Drivers, benefits and challenges*

Luiz Claudio Diogo Reis, Flavia Cristina Bernardini, Simone Bacellar Leal Ferreira and Claudia Cappelli - *An ICT governance analysis for the digital and smart transformation of Brazilian municipalities*

Gleycianne Rodrigues Araujo, Thiago José Tavares Ávila and Beatriz Barreto Brasileiro Lanza - *Impacts of an articulation group for the development of the Digital Government in the Brazilian Subnational Government*

Eurico Matos, Beatriz B. B. Lanza and Rodrigo D. Lara - *Mobile Government in States: Exploratory research on the development of mobile apps by the Brazilian subnational government*

Yohanna Juk, Daniel Valotto, Beatriz Lanza and Thiago José Tavares Ávila - *An Overview of On-Site Contact Centers in Subnational Governments in Brazil*

TRACK 10. Organizational Factors, Adoption Issues and Digital Government Impacts

Track Chairs: Jing Zhang, Chris Hinnant, and Lei Zheng

Rigoberto García-Contreras, J. Patricia Muñoz-Chávez, David Valle-Cruz, Edgar A. Ruvalcaba-Gómez and Jose Alberto Becerra-Santiago - *Teleworking in times of COVID-19: Some Lessons for the Public Sector from the emergent implementation during the pandemic period*

Giulia Maragno, Luca Gastaldi and Mariano Corso - *e-Government for Public Values creation: a systematic literature review*

Francesco Gualdi and Keisuke Idemitsu - *Navigating Public Values. How the Social Construction of Technology among Public Managers Defines the Nature of Public Values: Findings from a Japanese e-Government Project*

Noella Edelmann, Judith Schossböck and Valerie Albrecht - *Remote Work and Public Sector Organisations: The Influence of the Implementation of Remote Work on Organisational Culture and Digital Transformation*

Yue Gao and Jing Zhang - *Studying the Impacts of Federal funding on Residential Smart Meter Adoption and Utilities' Performance in the U.S.: A Simultaneous Equation Approach*



TRACK 11. Cyber-physical Innovations for Public Policy and Service

Track Chairs: Sukumar Ganapati, Michael Ahn, and Chengyu (Victor) Huang

Yu-Che Chen, Xiaoyue Cheng and Richard Knepper - *Performance of U.S. Scientific Research Cyberinfrastructure: Structural and Relational Factors for Usage*

Travis Munyer, Daniel Brinkman, Chenyu Huang and Xin Zhong - *Integrative Use of Computer Vision and Unmanned Aircraft Technologies in Public Inspection: A Case Study of Image Dataset Creation for Airports Foreign Object Debris Detection*

Michael Ahn and Shengli Chu - *What Matters in Maintaining Effective Open Government Data Systems? The Role of Government Capacity, Political and Legal Environment*

TRACK 12. Automation of Public Services – Concepts, Practice, Implications and Emerging Perspectives

Track Chairs: Ida Lindgren, Christian Østergaard Madsen, and Ulf Melin

Efthimios Tambouris and Konstantinos Tarabanis - *Towards Inclusive Integrated Public Service (IPS) Co-Creation and Provision*

Ida Lindgren, Daniel Toll and Ulf Melin - *Automation as a Driver of Digital Transformation in Local Government - Exploring Stakeholder Views on an Automation Initiative in a Swedish Municipality*

TRACK 13. Digital Government and Sustainable Development Goals

Track Chairs: Rony Medaglia and Gianluca Misuraca

Larissa Galdino de Magalhães Santos - *Vestiges of Brazilian technocracy: the Brazilian digital strategy and the achievement of the SDGs*

Rony Medaglia, Gianluca Misuraca and Vincenzo Aquaro - *Digital Government and the United Nations' Sustainable Development Goals: Towards an analytical framework*

TRACK 14. Blockchain-based applications for e-Government

Track Chairs: Jolien Ubacht, Svein Ølnes, Lemuria Carter, and Ramzi El-Haddadeh

Giulia Maragno, Luca Gastaldi, Luca Tangi and Michele Benedetti - *Blockchain applications within the public sector: evidence from an international census*

Oleksii Konashevych - *'GoLand Registry' Case Study: Blockchain/DLT Adoption in Land Administration in Afghanistan*

Stanislav Mahula, Evrim Tan and Joep Crompvoets - *With blockchain or not? Opportunities and challenges of self-sovereign identity implementation in public administration*

Boriana Rukanova, Jolien Ubacht, Séline van Engelenburg, Yao Hua Tan, Marco Geurts, Maarten Sies, Marcel Molenhuis and Micha Slegt - *Realizing value from voluntary business-government information sharing through blockchain-enabled infrastructures: The case of importing tires to the Netherlands using TradeLens*



TRACK 15. Legal Informatics

Track Chairs: Peter Parycek, Charalabidis Yannis, and Anna-Sophie Novak

Anna-Sophie Novak, Verena Huber and Shefali Virkar - *Digital legislation: Quo vadis?*

Michalis Avgerinos Loutsaris, Zoi Lachana, Charalampos Alexopoulos and Yannis Charalabidis
- *Legal Text Processing: Combing two legal ontological approaches through text mining*

DOCTORAL COLLOQUIUM

Chairs: J. Ramon Gil-Garcia, Ida Lindgren, and Gabriela Viale Pereira

Mariia Maksimova - *Envision, regulation, management, and impact of the implementation of cloud-based solutions for e-government: public-private collaboration in value creation*

Samar Fatima - *Mapping AI Approach across Countries*

Paul Staal - *Collaborative information exchange based on agreement frameworks*

Stanislav Mahula - *Designing blockchain-based public governance models: trade-offs, user roles and system design choices*

Felipe Vogas - *Essays on ecosystem orchestration and public value creation: challenges and opportunities in the age of digital transformation*

Wilfried Bazomanza Nzabandora - *The intra- and extra-organizational antecedents of blockchain technology diffusion in healthcare*

NETWORKING AND MENTORING SESSION

Chair: Gabriela Viale Pereira

POSTERS AND DEMONSTRATIONS

Chair: Sungsoo Hwang

Davide Di Staso, Fernando Kleiman, Joep Crompvoets and Marijn Janssen - *Changing Civil Servants' Awareness about Open Data Using a Collaborative Digital Game*

Cindy Schaefer, Aida Stelter, Caroline Rensing and Bjoern Niehaves - *Dynamic and Integrated Monitoring Concept for German Municipalities to Strengthen Resilience in Future Smart Cities*

Efthimios Tambouris and Konstantinos Tarabanis - *Inclusive Governance Models and ICT Tools for Integrated Public Service Co-Creation and Provision: The inGov project*

Lora Frecks - *Code for Nebraska: Community members driving change through open data*

Jing-Han Huang, Hao-Hsiang Chuang and Shih-Yi Chien - *Privacy Issues in Contact Tracing App*

Shahin Arefzadeh - *Privacy Issues in Patient-Driven Health Information networks for Open Data Management*

Abby Adams and Angela Hackstadt - *Distrust in institutions: Reference and library instruction in an infodemic*

Ronak Panchal, Priya Swaminarayan, Sanju Tiwari and Fernando Ortiz-Rodriguez - *AISHE-Onto: A Semantic Model for Public Higher Education Universities*

Luis Antonio López-Rivera, Marcelo Romero-Huertas and David Valle-Cruz - *A neural network-cellular automata based model for predicting vertical urban growth*

Boriana Rukanova, Yao Hua Tan, Robin Hamerlinck, Frank Heijmann and Jolien Ubacht - *Extended Data Pipeline for Circular Economy Monitoring*

Manuel Pedro Rodríguez Bolívar, Laura Alcaide Muñoz and Cristina Alcaide Muñoz - *Alignment of Open Government Initiatives between different government levels in Andalusia*

Laura Martinez - *Digital Innovations in the Public Sector: A Case Study of Panama*

Daniel Valotto, Yohanna Juk, Beatriz Barreto Brasileiro Lanza and Thiago José Tavares Ávila - *Challenges of Brazilian Subnational Government Service Portals*

Fatemeh Ahmadi Zeleti, Grace Walsh, Adegboyega Ojo and Emer Mulligan - *Multi-functional view of technology governance in tax administration: A case study*

Mikhail Bundin, Aleksei Martynov and Alexey Minbaleev - *Legal Aspects of the Use of Biometric Students' Identification for Distant and Online Learning: Russian Perspective*

Jakub Chabik - *Digital Government Measurement and Perception – Reality Check in Poland*

Alican Tonka, Burcu Demirdöven and Ecem Buse Sevinç Çubuk - *Preliminary Study on Turkey's AI Policy: Strategic Ambiguity or Long-term Uncertainty?*

Qianli Yuan - *Enhancing Innovation Capacity in Local Governments: How can Innovation Labs Make a Contribution?*

Sirisha Bojjireddy, Soon Chun and James Geller - *Machine Learning Approach to Detect Fake News, Misinformation in COVID-19 Pandemic*