



**24th IEEE International Conference on
Business Informatics (IEEE CBI 2022)
June 15–17, 2022, Amsterdam, The Netherlands**





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IEEE CBI 2022 full program

Wednesday June 15th, 2022

Room	Theater 5 / 2 nd floor	4A25 4 th floor
9.00-10.30	VORTE workshop Chair: Pedro Paulo Favato Barcelos <ul style="list-style-type: none">• Keynote: The Ontology of Trust and the Design of Trustworthy Systems, <i>Renata Guizzardi</i>• Knowledge Graph Semantic Annotation and Population with Real-Time Events Data from GDELT, Marc Gallofré Ocaña, Tareq Al-Moslmi and Andreas L. Opdahl,• Interoperating Vocabularies in Multilingual Domain Data, Simone Bocca, Gabor Bella and Fausto Giunchiglia	CBI Forum Chairs: Sybren de Kinderen and Jaap Gordijn <ul style="list-style-type: none">• Trust and its Extensions in Digital Platform Ecosystems: Key Concepts and Issues for Future Research, <i>Sebastian Reiners</i>• KnowGraph-MDM: A Methodology for Knowledge-Graph-based Master Data Management, <i>Nour Ramzy, Sandra Durst and Martin Schreiber</i>• Business Process Redesign Initiatives with the BPR:Assessment Framework, <i>George Tsakalidis, Nikolaos Nousias, Michael Madas and Kostas Vergidis</i>• Towards an event-centric knowledge graph approach for public administration, <i>Dimitris Zeginis and Konstantinos Tarabanis</i>
10.30-11.00	Break	
11.00-12.30	ITSS workshop Chair: Kevin J Lu <ul style="list-style-type: none">• Towards Uninterruptible Smart Home Processes, Kai Grunert• Community Embeddings with Bayesian Gaussian Mixture Model and Variational Inference, <i>Anton Begehr, Peter Panfilov</i>• Another Approach of DeFi: P2P Smart Contracts, <i>Ansel Shaidullin, Mikhail Komarov</i>	CBI Forum Chairs: Sybren de Kinderen and Jaap Gordijn <ul style="list-style-type: none">• Innovating Smart Product-Service Systems in Manufacturing SMEs: Current Practices, Affordances, and Constraints, <i>Daniel Heinz, Hae-Rin Park, Carina Benz and Gerhard Satzger</i>• Resource Requirements in Business Process Modelling from an Operations Management Perspective, <i>Asvin Goel and Min-Bin Lin</i>• Discovering Instance Spanning Exceptions from Process Execution Logs, <i>Florian Stertz, Karolin Winter and Stefanie Rinderle-Ma</i>• Global System for Avalanche Risk Assessment, <i>Fanny Pagnier, Frédéric Pourraz, Hervé Verjus, Didier Coquin and Gilles Mauris</i>
12.30-13.30	Lunch	

13.30-15.00	<p>CBI session 1: Information Systems Risk, Security and Resilience Track</p> <p>Chair: Jaap Gordijn</p> <ul style="list-style-type: none"> • SecRiskAI: a Machine Learning-based Approach for Cybersecurity Risk Prediction in Businesses, <i>Muriel Franco, Erion Sula, Alberto Huertas, Eder Scheid, Lisandro Granville and Burkhard Stiller</i> • The Sociotechnical Digital Twin: On the Gap Between Social and Technical Feasibility, <i>Balbir Barn</i> • Efficient Verification of Process Models Supporting Modifications of Data Values, <i>Elaheh Ordoni, Jutta Mülle, Kuan Yang and Klemens Böhm</i> 	<p>DGD workshop session 1</p> <p>Chair: Marc Makkes</p> <ul style="list-style-type: none"> • Keynote: <i>Thibault Schrepel</i> • Decentralized Governance inspired by Corporate Governance, <i>Hans Koning and Tina van der Linden</i> • Smart Legal Contracts & Smarter Dispute Resolution, <i>Ece Su Ustun and Melek Yuce</i>
15.00-15.30	Break	
15.30-17.00	<p>CBI session 2 Data and AI Application for Business Track</p> <p>Chair: Jens Gulden</p> <ul style="list-style-type: none"> • Data analytics and SMEs: how maturity improves performance, <i>Jeroen Baijens, Remko Helms and Laury Bollen</i> • No Time Like the Present: Effects of Language Change on Automated Comment Moderation, <i>Lennart Justen, Kilian Müller, Marco Niemann and Jörg Becker</i> • Developing a Generic Predictive Computational Model using Semantic data Pre-Processing with Machine Learning Techniques and its application for Stock Market Prediction Purposes, <i>Natalia Yerashenia, Alexander Bolotov and David Chan</i> 	<p>DGD workshop session 2</p> <p>Chair: Tina van der Linden</p> <ul style="list-style-type: none"> • Rethinking the Rule and Role of Law in Decentralized Finance, <i>Andre Wang</i> • Easing the use of smart contracts through model-based engineering, <i>Cristian Gómez Macías, Juan Manuel Vara, Francisco Javier Perez Blanco and Esperanza Marcos</i> • Watch the Gap: Making code more intelligible to users without sacrificing decentralization?, <i>Simona Ramos and Mannan Morshed</i>
17.00-19.00	Welcome reception (VU, NU building, 2nd floor)	

Thursday june 16th, 2022

Room	Theater 5 / 2 nd floor
9.00-9.15	Opening
9.15-10.30	Keynote 1: Business Information Systems in the Quantum Era – Ricardo Pérez-Castillo Chair: Geert Poels
10.30-11.00	Break
11.00-12.30	CBI session 3: Data and AI Application for Business Track II Chair: Geert Poels <ul style="list-style-type: none"> • Retail sales forecasting for a Brazilian supermarket chain: an empirical assessment, <i>Fernanda Monteiro De Almeida, Allan de Medeiros Martins, Marcus Alexandre Nunes and Leonardo Bezerra</i> • Supermarket customer segmentation: a case study in a large Brazilian retail chain, <i>Wellerson Viana de Oliveira, Daniel Sabino Amorim de Araújo and Leonardo Bezerra</i> • Challenges of pricing data assets: A call to take up!, <i>Wolfgang Badewitz, Christoph Hengesbach and Christof Weinhardt</i> • An Adaptable Framework for Entity Matching Model Selection in Business Enterprises, <i>Alex Boyko, Siamak Farshidi and Zhiming Zhao</i>
12.30-13.30	Lunch
13.30-15.00	CBI session 4: Enterprise Modelling, Engineering and Architecture Track Chair: Maria-Eugenia Iacob <ul style="list-style-type: none"> • ServML – A Domain-Specific Modeling Language as an Extension of SysML to Model Smart Service Systems, <i>Emanuel Marx</i> • Reconsidering the Notion of “Operating Model” in the context of Innovation and Transformation. A Systematic Literature Review, <i>Bart van der Heijden, Stijn Viaene and Amy Van Looy</i> • Towards a Reference Enterprise Architecture to enforce Digital Sovereignty in International Data Spaces, <i>Danniar Reza Firdausy, Patrício de Alencar Silva, Marten van Sinderen and Maria-Eugenia Iacob</i> • Understanding Interdependencies among Fog System Characteristics, <i>Maximilian Blume, Sebastian Lins and Ali Sunyaev</i>
15.00-15.30	Break
15.30-17.00	CBI session 5: Information Systems Engineering, Management and Governance Track I Chair: Erik Proper <ul style="list-style-type: none"> • IT Project Portfolio Assessment criteria: development and validation of a reference model, <i>Ruud Wissenburg, Rob Kusters, Harry Martin and Joyve Evers-Wagemakers</i> • IT Business Value Measurement and Communication: A Conceptual Framework, <i>Tobias Held and Markus Westner</i> • Perceived Challenges in Benefits Management – A Study of Public Sector Information Systems Engineering Projects, <i>Sinan Sigurd Tanilkan and Jo Erskine Hannay</i>
18.00-21.30	Conference dinner

Friday June 17th, 2022

Room	Theater 5 / 2 nd floor
9.00-10.30	Keynote 2: Design Science Methodology for Business Informatics – Roel Wieringa Chair: Miguel Mira da Silva

10.30-11.00	Break
11.00-12.30	<p>CBI session 6: Information Systems Engineering, Management and Governance Track II</p> <p>Chair: Kostas Vergidis</p> <ul style="list-style-type: none"> • Requirements for DataOps to foster Dynamic Capabilities in Organizations – A mixed methods approach, <i>Inan Gür, Frederik Möller, Marius Hupperz, Dilara Uzun and Boris Otto</i> • How EA Information Drives Digital Transformation: A Multiple Case Study and Framework, <i>Frank Grave, Rogier Van de Wetering and Rob Kusters</i> • A Unified Process Model of Information Systems Certification Internalization, <i>Philipp Danylak, Sebastian Lins, Malte Greulich and Ali Sunyaev</i> • Drivers and inhibitors of low code development platform adoption, <i>Sebastian Kaess, Susanne Strahringer and Markus Westner</i>
12.30-13.30	Lunch
13.30-15.00	<p>CBI session 7: Business Innovation and Digital Transformation Track</p> <p>Chair: Miguel Mira da Silva</p> <ul style="list-style-type: none"> • Describing Digital IT Consulting Services: The DITCOS Ontology Proposal and its Evaluation, <i>Meikel Bode, Maya Daneva and Marten van Sinderen</i> • Industry 4.0 Maintenance: An Examination Of The Readiness Of Germany's Industrial Sector, <i>Jonas Wanner, Lukas-Valentin Herm, Kevin Fuchs, Christian Janiesch and Axel Winkelmann</i> • Design of an Idea Evaluation Method for SMEs Involving External Support Units, <i>Andreas Hermann, Torsten Gollhardt and Jörg Becker</i> • Algorithmic Decision Making and Model Explainability Preferences in the Insurance Industry: A Delphi Study, <i>Eric Schotman and Deniz Iren</i>
15.00-15.30	Closing