ER 2022 Main Program (preliminary)

All times are in Indian Standard Time (IST)! Convert to your local time zone to plan your attendance to the sessions.

Oct 18, 2022

10:00 – 11:30 Session 1: Foundations of Conceptual Modeling

- *A FAIR Model Catalog for Ontology-Driven Conceptual Modeling Research* by Pedro Paulo F. Barcelos, Tiago Prince Sales, Mattia Fumagalli, Claudenir M. Fonseca, Isadora Valle Sousa, Elena Romanenko, Joshua Kritz and Giancarlo Guizzardi
- *Incorporating High-Order Types in Ontology-Driven Conceptual Modeling* by Claudenir M. Fonseca, Giancarlo Guizzardi, Joao Paulo A. Almeida, Tiago Prince Sales and Daniele Porello
- *Rethinking Model Representation - A Taxonomy of Advanced Information Visualization in Conceptual Modeling* by Giuliano De Carlo, Philip Langer and Dominik Bork
- *Pattern Discovery in Conceptual Models Using Frequent Itemset Mining* by Mattia Fumagalli, Tiago Prince Sales and Giancarlo Guizzardi (short paper)

10:00 – 11:30 Session 2: Quality and Performance

- *Bidirectional Relation Attention for Entity Alignment Based on Graph Convolutional Network* by Yayao Zuo, Minghao Zhan, Yang Zhou, and Peilin Zhan
- *A Behavioural Analysis of Metadata Use in Evaluating the Quality of Repurposed Data* by Hui Zhou, Lei Han, Gianluca Demartini, Marta Indulska and Shazia Sadiq
- *Modeling Context for Data Quality Management* by Flavia Serra, Verónika Peralta, Adriana Marotta and Patrick Marcel (short paper)
- *A Modeling Rule for Improving the Performance of Graph Models* by Dietrich Steinmetz, Felix Merz, Gerrit Burmester, Hui Ma and Sven Hartmann (short paper)

11:30 – 12:00 Break for Informal Discussions

12:00 – 12:30 Welcome to ER 2022 by ER 2022 chairs

12:30 – 13:30 Keynote 1 by Ashish Kundu

13:30 – 14:30 Break for Informal Discussions

14:30 – 15:30 Keynote 2 by Pankaj Jalote

15:30 – 16:00 Break for Informal Discussions

16:00 – 17:30 Session 3: Applications of Conceptual Modeling

- *Characterizing Fake News: A Conceptual Modeling-based Approach* by Nicolas Belloir, Wassila Ouerdane and Oscar Pastor
- *Modeling Lifelong Pathway Co-Construction* by Nicolas Ringuet, Patrick Marcel, Nicolas Labroche, Thomas Devogele and Christophe Bortolaso
- *LIREM: A Generic Framework for Effective Online Video Novelty Detection* by Chengkun He, Xiangmin Zhou and Chen Wang
- *When IT Service Adoption meets Behavioral Economics: Addressing Present Bias Challenges* by Iris Reinhartz-Berger, Doron Kliger, Eliad Amsalem and Alan Hartman

16:00 – 17:30 Session 4: Data Modeling and Analysis

- *Discovery of Spatial Association Rules from Fuzzy Spatial Data* by Henrique P. da Silva, Thiago D.R. Felix, Pedro V. A. B. de Venâncio and Anderson C. Carniel
- *A Comprehensive Approach for the Conceptual Modeling of Genomic Data* by Anna Bernasconi, Alberto García S., Stefano Ceri and Oscar Pastor
- *A Deep Learning Approach for Ideology Detection and Polarization Analysis using COVID-19 Tweets* by Md Yasin Kabir and Sanjay Madria
- *Effective Generation of Relational Schema from Multi-Model Data with Reinforcement Learning* by Gongsheng Yuan, Jiaheng Lu and Zhengtong Yan (short paper)

16:00 – 17:30 ER Forum 1: Conceptual Modeling Vision and Frameworks
- *Conceptual Modeling Systems: A Vision for the Future of Conceptual Modeling* by Roman Lukyanenko, Binny Samuel, Veda Storey and Arnon Sturm
- *Extending a Work System Metamodel Using a Knowledge Graph to Support IS Visualization and Development* by Sven Alter
- *TASC4RE: A data-driven context model to support the elicitation of context-aware functionalities* by Rodrigo Falcão, Maria Clara Pestana and Vaninha Vieira
- *Query-based Schema Evolution Recommendations for Hybrid Polystores* by Pol Benats, Loup Meurice, Maxime Gobert and Anthony Cleve
- *Object Event Modeling for DES and IS Engineering* by Gerd Wagner
- *A Conceptual Model for the Construction and Maintenance of Institutional Reality* by Paul Johannesson and Maria Bergholtz

Oct 19, 2022

10:00 – 11:30 ER 2022 Panel (chair: Sudha Ram)

11:30 – 12:00 Break for Informal Discussions

12:00 – 13:30 Session 5: Business Processes

- *Ontology-Supported Modeling of Bots in Robotic Process Automation* by Maximilian Völker and Mathias Weske
- *Stra2Bis: A Model-Driven Framework for Aligning Business Strategy and Business Processes* by Rene Noel, Jose Ignacio Panach, Marcela Ruiz and Oscar Pastor
- *Online Decision Mining and Monitoring in Process-Aware Information Systems* by Beate Scheibel and Stefanie Rinderle-Ma (short paper)
- *OPerA: Object-Centric Performance Analysis* by Gyunam Park, Jan Niklas Adams and Wil M. P. van der Aalst (short paper)

12:00 – 13:30 Session 6: Ontologies and their Applications

- *Legal Power-Subjection Relations: Ontological Analysis and Modeling Pattern* by Cristine Griffo, Tiago Prince Sales, Joao Paulo A. Almeida and Giancarlo Guizzardi
- *Atomically True Ontology Modelling: Residential Buildings* by Atish Maganlal and Duncan Coulter (short paper)
- *An Ontological Analysis of Digital Technology* by Silvia Bogea Gomes, Flavia Maria Santoro and Miguel Mira da Silva (short paper)
- *"All the Things that Come and Go, Stop and Say Hello": Towards an Ontological Account of How Participants Enter and Exit Events* by Fabrício Henrique Rodrigues, Joel Luís Carbonera, Lucas Valadares Vieira and Mara Abel (short paper)

13:30 – 14:30 Break for Informal Discussions

14:30 – 15:30 Keynote 3 by Bas van Gils

15:30 – 16:00 Break for Informal Discussions

16:00 – 17:30 Industrial Roundtable

16:00 – 17:30 ER Forum 2: Foundations and Tools
- *Data Consistency as a Criterion for Process Choreography Design* by Tom Lichtenstein and Mathias Weske
- *Resolving Conflicts in Process Models with Temporal Constraints* by Josef Lubas, Marco Franceschetti and Johann Eder
- *Semantifying BPMN: A tool to generate BPMN models using DEMO* by Sérgio Guerreiro and Pedro Sousa
- *TOOL – A Modeling tool and modeling observatory: An update on research and prototype development* by Stefan Strecker, Benjamin Ternes, Sven Christ
- *The bigER Modeling Tool* by Philipp-Lorenz Glaser, Georg Hammerschmied, Vladyslav Hnatiuk and Dominik Bork
- *FORT: a minimal Foundational Ontological Relations Theory for Conceptual modeling tasks* by Fatme Danash and Danielle Ziebelin
- *Ontologically Parsing Semi-structured Text with Unknown Grammars* by David W. Embley, Stephen Liddle, Deryle W. Lonsdale, Gary J. Norris and Scott N. Woodfield

Oct 20, 2022

10:00 – 11:30 Session 7: Security, Privacy and Risk Management

- *Object Normal Form, Fourth Normal Form and their Application to Database Security* by Sebastian Link
- *An Ontology of Security from a Risk Treatment Perspective* by Ítalo Oliveira, Tiago Prince Sales, Riccardo Baratella, Mattia Fumagalli and Giancarlo Guizzardi
- *Modeling Cybercrime with UFO-L: an Ontological Analysis of Non-Consensual Pornography Cases* by Mattia Falduti and Cristine Griffo

10:00 – 11:30 Session 8: Goals and Requirements

- *Modeling Rates of Change and Aggregations in Runtime Goal Models* by Rebecca Morgan, Simon Pulawski, Matt Selway, Wolfgang Mayer, Georg Grossmann, Markus Stumptner, Aditya Ghose, and Ross Kyprianou
- *Trying to Elicit and Assign Goals to the Right Actors* by Anouck Chan, Anthony Fernandes Pires and Thomas Polacsek (short paper)
- *Law Modeling for Fairness Requirements Elicitation in Artificial Intelligence Systems* by Ana Lavalle, Alejandro Maté, Juan Trujillo and Jorge García-Carrasco (short paper)

11:30 – 12:00 Break for Informal Discussions

12:00 – 13:00 Keynote 4 by Wolfgang Maaß

13:00 – 14:30 Peter Chen Award, Announcement of ER 2023, Farewell