Accepted Papers

Session: Foundations of Conceptual Modeling

A FAIR Model Catalog for Ontology-Driven Conceptual Modeling Research
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
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
Giuliano De Carlo, Philip Langer and Dominik Bork

Pattern Discovery in Conceptual Models Using Frequent Itemset Mining (short)
Mattia Fumagalli, Tiago Prince Sales and Giancarlo Guizzardi

Session: Ontologies and their Applications

Legal Power-Subjection Relations: Ontological Analysis and Modeling Pattern
Cristine Griffo, Tiago Prince Sales, Joao Paulo A. Almeida and Giancarlo Guizzardi

Atomically True Ontology Modelling: Residential Buildings (short)
Atish Maganlal and Duncan Coulter

An Ontological Analysis of Digital Technology (short)
Silvia Boga Gomes, Flavia Maria Santoro and Miguel Mira da Silva

"All the Things that Come and Go, Stop and Say Hello": Towards an Ontological Account of How Participants Enter and Exit Events (short)
Fabricio Henrique Rodrigues, Joel Luis Carbonera, Lucas Valadares Vieira and Mara Abel

Session: Applications of Conceptual Modeling

Characterizing Fake News: A Conceptual Modeling-based Approach
Nicolas Belloir, Wassila Ouerdane and Oscar Pastor

Modeling Lifelong Pathway Co-Construction
Nicolas Ringuet, Patrick Marcel, Nicolas Labroche, Thomas Devoge and Christophe Bortolaso

LIREM: A Generic Framework for Effective Online Video Novelty Detection
Chengkun He, Xiangmin Zhou and Chen Wang

When IT Service Adoption meets Behavioral Economics: Addressing Present Bias Challenges
Iris Reinhartz-Berger, Doron Kliger, Eliad Amsalem and Alan Hartman

Session: Data Modeling and Analysis

Discovery of Spatial Association Rules from Fuzzy Spatial Data
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
Anna Bernasconi, Alberto Garcia S., Stefano Ceri and Oscar Pastor
A Deep Learning Approach for Ideology Detection and Polarization Analysis using COVID-19 Tweets
Md Yasin Kabir and Sanjay Madria

Effective Generation of Relational Schema from Multi-Model Data with Reinforcement Learning (short)
Gongsheng Yuan, Jiaheng Lu and Zhengtong Yan

Session: Business Process

Ontology-Supported Modeling of Bots in Robotic Process Automation
Maximilian Völker and Mathias Weske

Stra2Bis: A Model-Driven Framework for Aligning Business Strategy and Business Processes
Rene Noel, Jose Ignacio Panach, Marcela Ruiz and Oscar Pastor

Online Decision Mining and Monitoring in Process-Aware Information Systems (short)
Beate Scheibel and Stefanie Rinderle-Ma

OPerA: Object-Centric Performance Analysis (short)
Gyunam Park, Jan Niklas Adams and Wil M. P. van der Aalst

Session: Quality and Performance

Bidirectional Relation Attention for Entity Alignment Based on Graph Convolutional Network
Yayao Zuo, Minghao Zhan, Yang Zhou, and Peilin Zhan

A Behavioural Analysis of Metadata Use in Evaluating the Quality of Repurposed Data
Hui Zhou, Lei Han, Gianluca Demartini, Marta Indulska and Shazia Sadiq

Modeling Context for Data Quality Management (short)
Flavia Serra, Verónica Peralta, Adriana Marotta and Patrick Marcel

A Modeling Rule for Improving the Performance of Graph Models
Dietrich Steinmetz, Felix Merz, Gerrit Burmester, Hui Ma and Sven Hartmann

Session: Security, Privacy and Risk Management

Object Normal Form, Fourth Normal Form and their Application to Database Security
Sebastian Link

An Ontology of Security from a Risk Treatment Perspective
Italo Oliveira, Tiago Prince Sales, Riccardo Baratella, Mattia Fumagalli and Giancarlo Guizzardi

Modeling Cybercrime with UFO-L: an Ontological Analysis of Non-Consensual Pornography Cases
Mattia Falduti and Cristine Griffo

Session: Goals and Requiremens

Modeling Rates of Change and Aggregations in Runtime Goal Models
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 (short)
Anouck Chan, Anthony Fernandes Pires and Thomas Polacsek
Law Modeling for Fairness Requirements Elicitation in Artificial Intelligence Systems (short)
Ana Lavalle, Alejandro Maté, Juan Trujillo and Jorge García-Carrasco