

CAiSE 2023 – Program at a Glance

Monday June 12	Tuesday June 13	Wednesday June 14	Thursday June 15	Friday June 16
<p>8:00 – 9:00 Registration (<i>Hall – Congress Palace</i>)</p> <p>9:00 – 10:30</p> <ul style="list-style-type: none"> • BPMDS/EMMSAD/ISESL Welcome & Keynote (<i>ROOM 9</i>) • HybridAIMS Welcome and Academic Keynotes (<i>ROOM 3</i>) • MOBA Session 1 (<i>BRIDGE PAVILION</i>) • DGD + BC4IS Session 1 (<i>ROOM 4</i>) 	<p>8:00 – 9:00 Registration (<i>Hall – Congress Palace</i>)</p> <p>9:00 – 10:30</p> <ul style="list-style-type: none"> • EMMSAD Session 5 (<i>ROOM 5 & 6</i>) • BPMDS Session 5 (<i>ROOM 3 & 4</i>) • ISESL Keynote (<i>ROOM 7</i>) • Agil-ISE Session 1 (<i>ROOM 9</i>) • MOBA Session 5 (<i>BRIDGE PAVILION</i>) • KG4SDSE Welcome & Keynote (<i>ROOM 8</i>) 	<p>8:00 – 9:00 Registration (<i>Hall – Congress Palace</i>)</p> <p>9:00 – 10:30 CAiSE'23 Welcome & Keynote 1 - Prof. Giancarlo Guizzardi. A Meaningful Road to Explanation. (<i>AUDITORIUM</i>)</p>	<p>8:00 – 9:00 Registration (<i>Hall – Congress Palace</i>)</p> <p>9:00 – 10:30 Report from the sustainability chairs & Keynote 2 - Bran Selic. Matching Software with Reality. (<i>AUDITORIUM</i>)</p>	<p>8:00 – 9:00 Registration (<i>Hall – Congress Palace</i>)</p> <p>9:00 – 10:30 Keynote 3 - Prof. Pnina Soffer. Theory-guided information systems engineering. (<i>AUDITORIUM</i>)</p>
		Coffee break (<i>ROOM C</i>)		
<p>11:00 – 12:30</p> <ul style="list-style-type: none"> • EMMSAD Session 2 (<i>ROOM 6</i>) • BPMDS Session 2 (<i>ROOM 3</i>) • ISESL Opening session (<i>ROOM 7</i>) • HybridAIMS Industry Keynote and Session 1 (<i>ROOM 9</i>) • MOBA Session 2 (<i>BRIDGE PAVILION</i>) • DGD + BC4IS Session 2 (<i>ROOM 4</i>) 	<p>11:00 – 12:30</p> <ul style="list-style-type: none"> • EMMSAD Session 6 (<i>ROOM 5 & 6</i>) • BPMDS Session 6 (<i>ROOM 3 & 4</i>) • ISESL Session 4 (<i>ROOM 7</i>) • Agil-ISE Session 2 (<i>ROOM 9</i>) • MOBA Session 6 (<i>BRIDGE PAVILION</i>) • KG4SDSE Session 1 (<i>ROOM 8</i>) 	<p>11:00 – 12:30</p> <ul style="list-style-type: none"> • <i>Session 1</i> Cyber-human & Cyber Physical Systems (<i>ROOM 3 & 4</i>) • <i>Session 2</i> Event-driven Process Mining (<i>ROOM 5 & 6</i>) • Tutorial: Oscar Diaz and Jeremías P. Contell Why is coming up with a Research Question difficult? (<i>ROOM 9</i>) 	<p>11:00 – 12:30</p> <ul style="list-style-type: none"> • <i>Session 5</i> Ontology & Knowledge Representation (<i>ROOM 3 & 4</i>) • <i>Session 6</i> Conformance, Compliance and Workarounds (<i>ROOM 5 & 6</i>) • Tutorial: Anthony Wasserman Open-Source Software for Information Systems (<i>ROOM 7 & 8</i>) • Doctoral Consortium – Session 1 (<i>ROOM 9</i>) 	<p>11:00 – 12:30</p> <ul style="list-style-type: none"> • <i>Session 13</i> Requirements Engineering (<i>ROOM 3 & 4</i>) • <i>Session 14</i> Service-related Approaches (<i>ROOM 5 & 6</i>) • Research Projects Exhibition (<i>ROOM 7 & 8</i>) <p>12:30 – 13:00 Conference Closing (<i>ROOM 9</i>)</p>
Lunch (<i>ROOM C</i>)	Lunch (<i>ROOM C</i>)	Lunch (<i>ROOM C</i>) & SC meeting (<i>ROOM 7 & 8</i>)	Lunch (<i>ROOM C</i>)	
<p>14:00 – 15:30</p> <ul style="list-style-type: none"> • EMMSAD Session 3 (<i>ROOM 5 & 6</i>) • BPMDS Session 3 (<i>ROOM 3 & 4</i>) • ISESL Session 2 (<i>ROOM 7</i>) • HybridAIMS Session 2 (<i>ROOM 9</i>) • MOBA Session 3 (<i>BRIDGE PAVILION</i>) 	<p>14:00 – 15:30</p> <ul style="list-style-type: none"> • EMMSAD Session 7: Short Research presentations & EMMSAD'23 awards (<i>ROOM 5 & 6</i>) • ISESL Panel Session (<i>ROOM 7</i>) • MOBA Session 7 (<i>BRIDGE PAVILION</i>) • KG4SDSE Session 2 (<i>ROOM 8</i>) 	<p>14:00 – 15:30</p> <ul style="list-style-type: none"> • <i>Session 3</i> IoT (<i>ROOM 3 & 4</i>) • <i>Session 4</i> Process Mining (<i>ROOM 5 & 6</i>) • Tutorial: Steven Alter The Work System Perspective (<i>ROOM 9</i>) 	<p>14:00 – 15:30</p> <ul style="list-style-type: none"> • <i>Session 7</i> Model-driven Approaches (<i>ROOM 3 & 4</i>) • <i>Session 8</i> Process Monitoring (<i>ROOM 5 & 6</i>) • <i>Session 9</i> Privacy and Security (<i>ROOM 7 & 8</i>) • Doctoral Consortium – Session 2 (<i>ROOM 9</i>) 	
Coffee break (<i>ROOM C</i>)	Coffee break (<i>ROOM C</i>)	15:30 - CAiSE Forum Pitches (<i>Room 9</i>) 15:50 - Coffee break & Posters (<i>ROOM C & B</i>)	Coffee break (<i>ROOM C</i>)	
<p>16:00 – 17:30</p> <ul style="list-style-type: none"> • EMMSAD Session 4: Panel discussion (<i>ROOM 5 & 6</i>) • BPMDS Session 4: Roundtable on the impact of AI on BPM (<i>ROOM 3 & 4</i>) • ISESL Session 3 (<i>ROOM 7</i>) • HybridAIMS Session 3 (World Café & Closing Session) (<i>ROOM 9</i>) • MOBA Session 4 (<i>BRIDGE PAVILION</i>) 	<p>16:00 – 17:30</p> <ul style="list-style-type: none"> • IFIP 8.1 & EMEA working group meeting (<i>ROOM 5 & 6</i>) • ISESL Session Closing Session (<i>ROOM 7</i>) • MOBA Session 8 (<i>BRIDGE PAVILION</i>) • KG4SDSE Session Panel Discussion & Conclusions (<i>ROOM 8</i>) 	<p>16:00 – 17:30 Panel: Academic life and career in the 21st century (<i>AUDITORIUM</i>)</p>	<p>16:00 – 17:30</p> <ul style="list-style-type: none"> • <i>Session 10</i> Environmental applications (<i>ROOM 3 & 4</i>) • <i>Session 11</i> Explainable AI (<i>ROOM 5 & 6</i>) • <i>Session 12</i> Data-Centric Approaches (<i>ROOM 7 & 8</i>) • Doctoral Consortium – Session 3 & Awards (<i>ROOM 9</i>) <p>17:30 – 18:30 SC meeting (<i>ROOM 9</i>)</p>	
	Pre-Conference Events Dinner 17:30 BRIDGE PAVILION	Conference Party 17:30 ALJAFERIA & ALQUERIA	Conference Dinner & CAiSE'23 Awards + CAiSE'24 Presentation 19:00 WATER TOWER	

8:00 – 9:00Registration. **HALL – CONGRESS PALACE****9:00 – 10:30**

- **EMMSAD & BPMDS & ISESL (Session 1) – Welcome and Keynote.** *Chaired by Dominik Bork and Henderik Proper.* **ROOM 9**
 - Welcome to EMMSAD 2023.
 - Keynote: *Sjaak Brinkkemper.* Situational AI Engineering for Automated Medical Reporting: Architecting and Experimentation in the Care2Report Research Program
- **HybridAIMS – Welcome and Academic Keynotes.** **ROOM 3**
 - Welcome and introduction from Emanuele Laurenzi.
 - Keynote (online): *Knut Hinkelmann.* Knowledge Matters: The Roles of Domain Knowledge for Creating and Interpreting Enterprise Models.
 - Keynote: *Giancarlo Guizzardi.* Semantic Models for Trustworthy Systems: A Hybrid Intelligence Augmentation Program.
- **MOBA (Session 1) – Modelling and Agility.** *Chaired by Martin Molhanec.* **BRIDGE PAVILION**
 - Introduction and Welcome to MOBA 2023.
 - *Boris Ulitin, Eduard Babkin, Tatiana Babkina and Igor Ulitin.* Application of an agent-based simulation for a definition of a trade-off retail price promotion strategy.
- **DGD + BC4IS (Session 1).** *Chaired by Victor Amaral de Sousa (BC4IS), Fadime Kaya (DGD) and Geert Poels.* **ROOM 4**
 - Grouped Workshop Introduction (BC4IS + DGD) + Keynote Introduction (BC4IS).
 - Keynote: *Felix Härer.* Blockchain Interoperability
 - Paper Presentation 1.
 - *Yulu Wang.* Blockchain Governance Design - A Computer Science Perspective

Coffee break (10:30 – 11:00) - ROOM C

11:00 – 12:30

- **EMMSAD (Session 2) – Foundations & method engineering.** *Chaired by Jolita Ralyté.* **ROOM 6**
 - *Roman Lukyanenko, Jeffrey Parsons, Veda C. Storey, Binny M. Samuel and Oscar Pastor.* Principles of universal conceptual modeling.
 - *Raquel Araújo de Oliveira, Mario Cortes-Cornax and Agnès Front.* Supporting Method Creation, Adaptation and Execution with a Low-code Approach.
 - *Cesar Gonzalez-Perez, Martín Pereira-Fariña and Patricia Martín-Rodilla.* IAT/ML: A Domain-Specific Approach for Discourse Analysis and Processing.
- **BPMDS (Session 2) – AI for Business Process Management.** *Chaired by Rainer Schmidt & Han van der Aa.* **ROOM 3**
 - BPMDS Opening.
 - *Kiran Busch, Alexander Rochlitzer, Diana Sola and Henrik Leopold.* Just Tell Me: Prompt Engineering in Business Process Management.
 - *Aaron Friedrich Kurz, Timotheus Kampik, Luise Pufahl and Ingo Weber.* Reinforcement Learning-supported AB Testing of Business Process Improvements: An Industry Perspective.
- **ISESL (Session 1) – ISESL Opening Session.** *Chaired by Rébecca Deneckère.* **ROOM 7**
 - *Elena Kornyshova, Rébecca Deneckère, Kaoutar Sadouki, Eric Gressier-Soudan, John Murray and Sjaak Brinkkemper.* Smart Life and Smart Life Engineering.
 - *Yulliwas Ameer and Samia Bouzefrane.* Smart Life Privacy: An Overview of Current Strategies and Future Directions.
 - *Lucas Mohimont, Lilian Hollard and Luiz Angelo Steffemel.* Smart-Viticulture and Deep Learning: Challenges and Recent Developments on Yield Prediction.
 - *Mohamed Amine Boudia, Philippe Roose and Sébastien Laborie.* Smart city: Road flow management: An adaptation of K-means for Smart Controller Traffic Lights.
- **HybridAIMS (Session 1) – Industry Keynote and Session 1 - Position Papers.** *Chaired by Hans-Friederich Witschel (online).* **ROOM 9**
 - Industry Keynote: *Evgeny Kharmalov.* Neuro-Symbolic AI for Industry 4.0.
 - *Fabian Baumann, Knut Hinkelmann and Devid Montecchiari.* Supporting Reuse of Business Process Models by Semantic Annotation.
 - *Stella Gatzju Grivas and Denis Imhof.* Hybrid Artificial Intelligence for Realizing a Leadership Assistant for Platform-Based Digital Leadership Consulting.
 - *Philipp Fukas, Aydin Bozkurt, Nora Lenz and Oliver Thomas.* Developing a Maturity Assessment Tool to Enable the Management of Artificial Intelligence for Organizations.
- **MOBA (Session 2) – Modelling and Agility.** *Chaired by Martin Molhanec.* **BRIDGE PAVILION**
 - *Josef Pavlicek.* Business process models (BPMN and DEMO notation) - Usability study.
 - *Matej Brnka, Petra Pavlickova and Jan Rydval.* ANP Model as a Support to Decide the Project Management Style.
- **DGD + BC4IS (Session 2).** *Chaired by Geert Poels and Victor Amaral de Sousa.* **ROOM 4**
 - PhD Presentation. *Fadime Kaya.* DECENT a domain specific language to design Blockchain governance.
 - Paper Presentation 2. *Lei Xu, Yuewei Zhang and Liehuang Zhu.* Regulation-Friendly Privacy-Preserving Blockchain Based on zk-SNARK
 - Paper Presentation 3. *Simona Ramos.* The MEV Saga: Can Regulation Illuminate the Dark Forest?
 - Quick wrap-up of the workshops.

Lunch (12:30 – 14:00) - ROOM C

14:00 – 15:30

- **EMMSAD (Session 3) – Enterprise architecture & transformation.** *Chaired by Istvan David.* **ROOM 5 & 6**
 - *Simon Hacks and Jürgen Jung.* A First Validation of the Enterprise Architecture Debts Concept.
 - *Benjamin Somers, Fabien Dagnat and Jean-Christophe Bach.* Modeling heterogeneous IT infrastructures: a collaborative component-oriented approach.
 - *Jonas Van Riel, Geert Poels and Stijn Viaene.* Exploring Capability Mapping as a Tool for Digital Transformation: Insights from a Case Study.
- **BPMS (Session 3) – Modeling and Transforming Process Data.** *Chaired by Henrik Leopold.* **ROOM 3 & 4**
 - *Andreas Fritsch, Selina Schüller, Martin Forell and Andreas Oberweis.* Modelling and Execution of Data-Driven Processes with JSON-Nets.
 - *Alexandre Goossens, Charlotte Verbruggen, Johannes De Smedt, Jan Vanthienen and Monique Snoeck.* Aligning object-centric event logs with data-centric conceptual models.
 - *Moshe Hadad, Gal Engelberg and Pnina Soffer.* From Network Traffic Data to a business-level Event Log.
- **ISESL (Session 2) – Smart Environments.** *Chaired by John Murray.* **ROOM 7**
 - *Lieve Heyrman, Tim Guily, Rebecca Deneckere, Elena Kornyshova and Ramona Elali.* Leuven: a Smart City Experience.
 - *Sjaak Brinkkemper.* Conversational Applications in Healthcare.
- **HybridAIMS (Session 2) – Full Papers.** *Chaired by Giancarlo Guizzardi.* **ROOM 9**
 - *Frederik Fonger, Milda Aleknyte-Resch and Agnes Koschmider.* Mapping Time-Series Data on Process Patterns to Generate Synthetic Data.
 - *Jack Daniel Rittelmeyer and Kurt Sandkuhl.* Morphological Box for AI Solutions: Development, Evaluation and Application Options.
 - *Valeriia Afonina, Knut Hinkelmann and Devid Montecchiari.* Enriching Enterprise Architecture Models with Healthcare Domain Knowledge.
- **MOBA (Session 3) – Innovations and Agility.** *Chaired by Vojtěch Merunka.* **BRIDGE PAVILION**
 - Keynote: *Joseph Barjis.* Enterprise Agile Transformation Using a System Approach
 - *Konstantinos Tsilonis, Yves Wautelet, Lena Truyers and Yan Ding.* Strategic Agility in Practice: Experts' Opinions on the Applicability of a Model-Driven Framework.

Coffee break (15:30 – 16:00) - ROOM C

16:00 – 17:30

- **EMMSAD (Session 4) – Panel discussion.** *Chaired by Henderik Proper.* **ROOM 5 & 6**
 - The Role of Modeling in the Analysis and the Design of Sustainable Systems.
 - Panelists:
 - *Iris Reinhartz-Berger,* University of Haifa, Israel.
 - *Istvan David,* University of Montreal, Canada.
 - *Sergio España,* Utrecht University, the Netherlands & Universitat Politècnica de València, Spain.
 - *Giancarlo Guizzardi,* University of Twente, the Netherlands.
- **BPMS (Session 4) – Roundtable on the impact of AI on BPM.** *Chaired by Rainer Schmidt.* **ROOM 3 & 4**
- **ISESL (Session 3) – Smart Users and Artefacts.** *Chaired by Elena Kornyshova.* **ROOM 7**
 - *António Galvão, Fernando Brito E Abreu and João Joanaz de Melo.* Towards a Consensual Definition for Smart Tourism and Smart Tourism Tools.
 - *Kai Jacobs.* Stakeholders in Smart City Standardisation.
 - *Mukesh Chaware and Bibaswan Basu.* Applied Robotics and Wearables in Healthcare: Current Trends and Future Directions.
- **HybridAIMS (Session 3) – World Café & Closing Session.** *Chaired by Emanuele Laurenzi.* **ROOM 9**
 - Challenge presentation, group formation, group work and pitching session and final discussion.
- **MOBA (Session 4) – Innovations and Agility.** *Chaired by Vojtěch Merunka.* **BRIDGE PAVILION**
 - Round-table - Modern ways of modeling business processes - methods, tools, thoughts, and ideas.

8:00 – 9:00

Registration. **HALL – CONGRESS PALACE**

9:00 – 10:30

- **EMMSAD (Session 5) – Model-driven engineering.** *Chaired by Jürgen Jung.* **ROOM 5 & 6**
 - *Charlotte Verbruggen and Monique Snoeck.* TEC-MAP: a Taxonomy of Evaluation Criteria for Multi-Modelling Approaches.
 - *Fabian Muff, Nathalie Spicher and Hans-Georg Fill.* Integrating Physical, Digital, and Virtual Modeling Environments in a Collaborative Design Thinking Tool.
 - *Istvan David, Vasco Sousa and Eugene Syriani.* Opportunities in Robotic Process Automation by and for Model-Driven Software Engineering.
- **BPMS (Session 5) – Decision and Context-aware Business Process Management.** *Chaired by Prina Soffer.* **ROOM 3 & 4**
 - *Pietro Portolani, Diego Savoia, Andrea Ballarino and Matteo Matteucci.* A Novel Decision Mining Method Considering Multiple Model Paths.
 - *Yusuf Kirikkayis, Florian Gallik and Manfred Reichert.* Modeling, Executing and Monitoring IoT-Driven Business Rules.
 - *Leo Poss and Stefan Schönig.* A Generic Approach towards Location-aware Business Process Execution.
- **ISESL (Session 4).** *Chaired by Sjaak Brinkkemper.* **ROOM 7**
 - Keynote: *Breogan Sanchez.* Smart City Zaragoza.
- **Agil-ISE (Session 1).** *Chaired by Geert Poels, Palash Bera, Yves Wautelet.* **ROOM 9**
 - Welcome.
 - Keynote: *Maya Daneva.* Lessons Learned from 15 Years of Empirical Research on Agile and DevOps.
 - *Wasim Alsaqaf, Maya Daneva and Roel Wieringa.* Towards a Solution Proposal to Agile Quality Requirements Challenges in Large-scale Projects.
 - *Soreangsev Kiv.* Socio-Intentional Framework for Agile Methods Tailoring: Past, Present, and Future.
- **MOBA (Session 5) – Modelling and Agility.** *Chaired by Boris Ulitin.* **BRIDGE PAVILION**
 - *Adela Hamplova and David Franc.* Character segmentation in the development of Palmyrene Aramaic OCR.
 - *Nicolai Schützenmeier, Stefan Jablonski, Martin Käppel and Lars Ackermann.* Comparing Imperative and Declarative Process Models.
- **KG4SDSE – Welcome & Keynote.** **ROOM 8**
 - Welcome Message, *Robert Buchmann.*
 - Keynote: *Nicolas Spyrtos.* A Graph Data Model for Data Analytics and Information Integration.

Coffee break (10:30 – 11:00) - ROOM C

11:00 – 12:30

- **EMMSAD (Session 6) – Visualization & process modeling.** *Chaired by Iris Reinhartz-Berger.* **ROOM 5 & 6**
 - *Tong Li, Xiang Wei and Yiting Wang.* A Requirements-Driven Framework for Automatic Data Visualization.
 - *Felix Cammaerts and Monique Snoeck.* Comparing different visualizations for feedback on test execution in a Model-Driven Engineering environment.
 - *Tsung-Hao Huang and Wil M. P. van der Aalst.* Unblocking Inductive Miner - While Preserving Desirable Properties.
- **BPMS (Session 6) – Modeling Temporal and Behavioral Process Constraints.** *Chaired by Stefan Schönig.* **ROOM 3 & 4**
 - *Josef Lubas and Johann Eder.* Time-aware Contract Model for Legal Smart Contracts.
 - *Nicolai Schützenmeier, Carl Corea, Patrick Delfmann and Stefan Jablonski.* Efficient Computation of Behavioral Changes in Declarative Process Models.
 - *Kerstin Andree, Dorina Bano and Mathias Weske.* Beyond Temporal Dependency: An Ontology-Based Approach to Modeling Causal Structures in Business Processes.
- **ISESL (Session 5) – User Experience in Smart Life Applications.** *Chaired by Angelo Steffanel.* **ROOM 7**
 - *Tomas Santos, Rui Neto Marinheiro and Fernando Brito E Abreu.* Making Tourists Experience Smarter by Mitigating Overtourism.
 - *Tarmo Robal, Uljana Reinsalu.* How Do You Ride an Elevator? – Passenger In-Cabin Behaviour Analysis on a Smart-Elevator Platform.
 - *Carlos Portugal, David Vaz, Miguel Sales Dias, Alcina Prata, Fernando Brito E Abreu, Pedro Trocado.* Enhancing the Visitor Experience with Immersive Technologies and Gaming: the Monserrate Use Case.
 - *John Murray.* A Review of Some Key Social, Behavioural, and Ethical Considerations for Smarter Life Engineering.
- **Agil-ISE (Session 2).** *Chaired by Geert Poels, Palash Bera, Yves Wautelet.* **ROOM 9**
 - *Thoby Visser and Joris Hulstijn.* Measuring Agile/DevOps team performance.
 - *Jolanta Gaudone and Māriete Kirikova.* Systematic Literature Review of Agile Framework Application for IT System Development in Public Sector.
 - *Bert de Brock.* Teaching and practising RE for agility.
 - Closing remarks.
- **MOBA (Session 6) – Modelling and Agility.** *Chaired by Boris Ulitin.* **BRIDGE PAVILION**
 - *Martin Molhanec.* Deriving Relational Normalisation from Conceptual Normalisation.
 - *Simona Colucci, Francesco M Donini and Eugenio Di Sciascio.* On the relevance of explanation for RDF resources similarity.
- **KG4SDSE (Session 1).** *Chaired by Fadime Kaya.* **ROOM 8**
 - *Anne Füll, Volker Nissen and Stefan Horst Heringklee.* Interactive Machine Learning of Knowledge Graph-based Explainable Process Analysis.
 - *Bram Bazuin, Sander Stolk and Marco Stevens.* Towards Recommendations for Knowledge-graph-based Requirements Management in Construction: a Report on the EU DigiChecks Project.
 - *Alexander Völz, Danial M. Amlashi and Moonkun Lee.* Semantic Matching through Knowledge Graphs: A Smart City Case.
 - *Jolanta Gaudone and Marite Kirikova.* A Weighted Knowledge Graph for Representing the Results of a Systemic Literature Review.
 - *R. E. Kurt Stirewalt and Márton Búr.* The RAI Way: A Technical Analysis and Design Method for Building Enterprise Semantic Layers.

Lunch (12:30 – 14:00) - ROOM C

14:00 – 15:30

- **EMMSAD (Session 7) – Short Research presentations & EMMSAD'23 awards.** *Chaired by Dominik Bork and Henderik Proper.* **ROOM 5 & 6**
- **ISESL – Panel Session.** *Chaired by Rébecca Deneckère and Elena Kornysheva.* **ROOM 7**
 - Architecting Smart Life.
 - Panelists:
 - Sjaak Brinkkemper.
 - John Murray.
 - Angelo Steffemel.
- **MOBA (Session 7) – Modelling and Agility.** *Chaired by Josef Pavlíček.* **BRIDGE PAVILION**
 - *Vojtech Merunka, Himesha Wijekoon and Boris Schegolev.* Transformation of Class Hierarchies during Agile Software Development in UML.
 - Doctorand Consortium I.
 - *Dmitriy Uraev.* Designing Formal Representation of Heterogeneous XML Documents Collection for Intra-Enterprise Usage.
 - Supervisor: *Pavel Malyzhenkov.*
- **KG4SDSE (Session 2).** *Chaired by Alexander Völz.* **ROOM 8**
 - *Ştefan Uifălean.* Employing Knowledge Graphs for Capturing Semantic Aspects of Robotic Process Automation.
 - *Angelo Fiorentino, Fadime Kaya and Paul Johannesson.* Knowledge Engineering - Formalizing DECENT Metamodel.
 - *Amin Anjomshoaa, Hannah Schuster, Johannes Wachs and Axel Polleres.* Towards Crisis Response and Intervention using Knowledge Graphs – CRISP Case Study.
 - *Andreas Andreou, Donatella Firmani, Jerin George Mathew, Massimo Mecella and Michalis Pingos.* Using Knowledge Graphs for Record Linkage: Challenges and Opportunities.
 - *Newres Al Haider, Keng Ng, Ali Hashmi, Lauma Veidemane and Diederik Schut.* A Linked Data Based Advanced Credit Rationale.

Coffee break (15:30 – 16:00) - ROOM C

16:00 – 17:30

- **IFIP 8.1 & EMEA working group meeting.** *Chaired by Janis Stirna and Henderik Proper.* **ROOM 5 & 6**
- **ISESL – Closing Session.** *Chaired by Sjaak Brinkkemper.* **ROOM 7**
 - Discussion on cross-cutting concerns and future activities
- **MOBA (Session 8) – Modelling and Agility.** *Chaired by Josef Pavlíček.* **BRIDGE PAVILION**
 - Doctorand Consortium II.
 - *Polina Busygina.* Design and Comparative Study of Simulation Models of Inquiring Systems.
 - *Sergey Anisimov.* Influence of Automation of Rolling Stock Repair on the Model of Railway Enterprise Architecture
 - Supervisor: *Pavel Malyzhenkov.*
 - Closing of MOBA 2023.
- **KG4SDSE – Panel Discussion & Conclusions.** **ROOM 8**
 - Expectations from Large Language Models and Deep Learning for Semantics-driven Systems Engineering
 - Moderator: *Dimitris Karagiannis,* University of Vienna, Austria
 - Panelists:
 - *Dimitris Plexousakis,* Institute of Computer Science, FORTH and University of Crete, Greece.
 - *Johann Eder,* Alpen-Adria University Klagenfurt, Austria.
 - *Hans-Georg Fill,* University of Fribourg, Switzerland.
 - *Ulrich Frank,* University of Duisburg-Essen, Germany

Pre-Conference Events Dinner
BRIDGE PAVILION (17:30)

8:00 – 9:00

Registration. **HALL – CONGRESS PALACE**

9:00 – 10:30

- **CAiSE'23 Welcome & Keynote 1.** Welcome by *Carlos Cetina* and *Oscar Pastor*. Keynote chaired by *Marta Indulska*. **AUDITORIUM**
 - Keynote: *Giancarlo Guizzardi*. A Meaningful Road to Explanation.

Coffee break (10:30 – 11:00) - ROOM C

11:00 – 12:30

- **Cyber-human & Cyber Physical Systems (Session 1).** Chaired by *Matthias Jarke*. **ROOM 3 & 4**
 - *Chiara Lucifora, Misael Mongiovi, Luana Bulla, Stefano De Giorgis and Aldo Gangemi*. Comparing User Perspectives in a Virtual Reality Cultural Heritage Environment.
 - *Steven Alter*. Can Information System Engineering Make Cyber-Human Systems Smarter?
 - *Xiwei Li, Xi Wu, Yongxin Zhao and Yongjian Li*. Perceptual Risk-Aware Adaptive Responsibility Sensitive Safety for Autonomous Driving.
- **Event-driven Process Mining (Session 2).** Chaired by *María Teresa Gómez*. **ROOM 5 & 6**
 - *Diego Calvanese, Mieke Jans, Tahir Emre Kalayci and Marco Montali*. Extracting Event Data from Document-Driven Enterprise Systems.
 - *Hannes Häfke and Sebastiaan van Zelst*. Event Data-Driven Feasibility Checking of Process Schedules.
 - *Christoffer Olling Back and Jakob Grue Simonsen*. Comparing Trace Similarity Metrics across Logs and Evaluation Measures.
- **Tutorial 1. ROOM 9**
 - *Oscar Diaz and Jeremías P. Contell*. Why is coming up with a Research Question difficult?

Lunch - ROOM C & SC meeting (12:30 – 14:00) - ROOM 7 & 8

14:00 – 15:30

- **IoT (Session 3).** Chaired by *Janis Stirna*. **ROOM 3 & 4**
 - *Marc Vila, Maria-Ribera Sancho and Ernest Teniente*. Modeling Context-Aware Events and Responses in an IoT Environment.
 - *Riccardo Pincioli, Raffaella Mirandola and Catia Trubiani*. Modular Quality-of-Service Analysis of Software Design Models for Cyber-Physical Systems.
 - [Journal First] *Ronny Seiger, Lukas Malburg, Barbara Weber and Ralph Bergmann*. Integrating process management and event processing in smart factories: A systems architecture and use cases.
- **Process Mining (Session 4).** Chaired by *Massimo Mecella*. **ROOM 5 & 6**
 - *Adrian Rebmann and Han van der Aa*. Unsupervised Task Recognition from User Interaction Streams.
 - *Vanessa Pradas Fernández, Ángel Jesús Varela-Vaca and María Teresa Gómez López*. Revealing the importance of Setting Parameters in Declarative Discovery Algorithms: A evolutionary-based methodology.
 - *Katsiaryna Lashkevich, Fredrik Milani, David Chapela-Campa, Ihar Suvorau and Marlon Dumas*. Why am I Waiting? Data-Driven Analysis of Waiting Times in Business Processes.
- **Tutorial 2. ROOM 9**
 - *Steven Alter*. The Work System Perspective.

CAiSE Forum Pitches (15:30 – 15:50) (See accepted papers at: <https://caise23.svit.usj.es/accepted-papers-caise-forum/>). **ROOM 9**

Coffee break & CAiSE Forum Poster (15:50 – 16:00) - ROOM C & B

16:00 – 17:30

- **Panel. AUDITORIUM**
 - Title: Academic life and career in the 21th century.
 - Moderators
 - *Stefanie Rinderle-Ma*. Technische Universität München, Germany.
 - *Hajo Reijers*. Utrecht University, Netherlands.
 - Panelists:
 - *Martin Käppel*. Universität Bayreuth, Germany.
 - *Kateryna Kubrak*. University of Tartu, Estonia.
 - *Ernest Teniente*. Universidad Politécnica de Cataluña.
 - *Xixi Lu*. Utrecht University, Netherlands.
 - *Karolin Winter*. Eindhoven University of Technology, Netherlands.
 - *Francesca Zerbato*. University. St. Gallen, Switzerland.

Conference Party

ALJAFERIA PALACE & ALQUERIA ESTATE (17:30)

8:00 – 9:00Registration. **HALL – CONGRESS PALACE****9:00 – 10:30**

- **CAISE'23 Keynote 2.** *Chaired by Iris Reinhartz-Berger.* **AUDITORIUM**
 - Report from the sustainability chairs
 - Keynote: *Bran Selic.* Matching Software with Reality.

Coffee break (10:30 – 11:00) - ROOM C

11:00 – 12:30

- **Ontology & Knowledge Representation (Session 5).** *Chaired by Ulrich Frank.* **ROOM 3 & 4**
 - *Oscar Díaz and Xabier Garmendia.* Where are the readings behind your concept maps? Annotation-driven Concept Mapping.
 - *Anna Bernasconi, Alberto García S., Giancarlo Guizzardi, Luiz Olavo Bonino da Silva Santos and Veda C. Storey.* Ontological representation of FAIR principles: A blueprint for FAIRer data sources.
 - *Syed Juned Ali, Giancarlo Guizzardi and Dominik Bork.* Enabling Representation Learning in Ontology-Driven Conceptual Modeling using Graph Neural Networks.
- **Conformance, Compliance and Workarounds (Session 6).** *Chaired by Barbara Weber.* **ROOM 5 & 6**
 - *Catherine Sai, Karolin Winter, Elsa Fernanda and Stefanie Rinderle-Ma.* Detecting Deviations Between External and Internal Regulatory Requirements for Improved Process Compliance Assessment.
 - *Marisol Barrientos, Karolin Winter, Jürgen Mangler and Stefanie Rinderle-Ma.* Verification of Quantitative Temporal Compliance Requirements in Process Descriptions over Event Logs.
 - [Journal First] *Pnina Soffer, Nesi Outmazgin, Irit Hadar and Shay Tzafrir.* Why Work Around the Process? Analyzing Workarounds Through the Lens of the Theory of Planned Behavior.
- **Tutorial 3.** **ROOM 7 & 8**
 - *Anthony Wasserman.* Open-Source Software for Information Systems.
- **Doctorial Consortium (Session 1).** *Chaired by Jolita Ralyte.* **ROOM 9**
 - *Gabriel Morais.* Enabling Systematic Microservices Reuse Through DevOps - Mentors: *Xavier Franch and Raimundas Matulevicius.*
 - *Alberto Gaspar Villalba.* Methodology to Automate Intelligent User Interfaces' Development - Mentors: *Jolita Ralyte and Xavier Franch.*
 - *Jan Lundberg.* Towards a Conceptual Framework for System of Systems - Mentors: *John Krogstie and Selmin Nurcan.*

Lunch (12:30 – 14:00) - ROOM C

14:00 – 15:30

- **Model-driven Approaches (Session 7).** *Chaired by Monique Snoeck.* **ROOM 3 & 4**
 - *Michele Chiari, Bin Xiang, Galia Novakova Nedeltcheva, Elisabetta Di Nitto, Lorenzo Blasi, Debora Benedetto and Laurentiu Niculut.* DOML: A New Modelling Approach To Infrastructure-as-Code.
 - *Vijanti Ramautar, Sergio España and Sjaak Brinkkemper.* Task Completeness Assessments in the Evolution of Domain-Specific Modelling Languages.
 - *Laura García-Borgoñón, Miguel Angel Barcelona, Armando J Egea, German Reyes, Alejandro Sainz de la Maza and Adolfo Gonzalez.* Lessons learned in model-based reverse engineering of large legacy systems.
- **Process Monitoring (Session 8).** *Chaired by Adela del Río Ortega.* **ROOM 5 & 6**
 - *Kateryna Kubrak, Fredrik Milani, Alexander Nolte and Marlon Dumas.* Design and Evaluation of a User Interface Concept for Prescriptive Process Monitoring.
 - *Zahra Dasht Bozorgi, Marlon Dumas, Marcello La Rosa, Artem Polyvyanyy, Mahmoud Shoush and Irene Teinmaa.* Learning When to Treat Business Processes: Prescriptive Process Monitoring with Causal Inference and Reinforcement Learning.
 - *Martin Käppel and Stefan Jablonski.* Model-Agnostic Event Log Augmentation for Predictive Process Monitoring.
- **Privacy and Security (Session 9).** *Chaired by Pierluigi Plebani.* **ROOM 7 & 8**
 - *Jan Pennekamp, Johannes Lohmöller, Eduard Vlad, Joscha Loos, Niklas Rodemann, Patrick Sapel, Ina Berenice Fink, Seth Schmitz, Christian Hopmann, Matthias Jarke, Günther Schuh, Klaus Wehrle and Martin Henze.* Designing Secure and Privacy-Preserving Information Systems for Industry Benchmarking.
 - *Ryan Hildebrant, Stephan Fahrenkrog-Petersen, Matthias Weidlich and Shangping Ren.* PMDG: Privacy for Multi-perspective Process Mining through Data Generalization.
 - *Lukas Daubner, Raimundas Matulevicius, Barbora Buhnova, Matej Antol, Michal Růžička and Tomáš Pítner.* Impact of Forensic-Ready Information Systems on the Security Posture.
- **Doctorial Consortium (Session 2).** *Chaired by Janis Stirna.* **ROOM 9**
 - *Guzmán Llambías.* Blockchain Interoperability - Mentors: *Janis Stirna and Pnina Soffer.*
 - *Mariia Bakhtina.* Towards More Secure and Data Protective Intelligent Infrastructure Systems - Mentors: *Janis Stirna and Hajo Reijers.*
 - *Mahmoud Shoush.* Prescriptive Monitoring of Business Processes Under Uncertainty and Resource Constraints - Mentors: *Pnina Soffer and Hajo Reijers.*

Coffee break (15:30 – 16:00) - ROOM C

16:00 – 17:30

- **Environmental applications (Session 10).** *Chaired by Selmin Nurcan. ROOM 3 & 4*
 - *Chihab Hanachi, Patricia Stolf and Aurelien Richa.* Simulating and Analyzing Crowdsourcing Impacts in Flood Management: a geo-spatial agent-based approach.
 - *Martín Anselmo and Monica Vitali.* A Data-Centric Approach For Reducing Carbon Emissions in Deep Learning.
 - [Journal First]. *Rubén Béjar, Javier Lacasta, Francisco J. Lopez-Pellicer and Javier Nogueras-Iso.* Discrete Global Grid Systems with quadrangular cells as reference frameworks for the current generation of Earth observation data cubes.
- **Explainable AI (Session 11).** *Chaired by Dominik Bork. ROOM 5 & 6*
 - *Olusanmi Hundogan, Xixi Lu, Yupei Du and Hajo A. Reijers.* CREATED: Generating Viable Counterfactual Sequences for Predictive Process Analytics.
 - *Andrei Buliga, Chiara Di Francescomarino, Chiara Ghidini and Fabrizio Maria Maggi.* Counterfactuals and Ways to Build Them: Benchmarking Approaches in Predictive Process Monitoring.
- **Data-Centric Approaches (Session 12).** *Chaired by Han van der Aa. ROOM 7 & 8*
 - *Kristo Raun, Max Nielsen, Andrea Burattin and Ahmed Awad.* C-3PA: Streaming Conformance, Confidence and Completeness in Prefix-Alignments.
 - *Francesca Zerbato, Andrea Burattin, Hagen Völzer, Paul Nelson Becker, Elia Boscaini and Barbara Weber.* Supporting Provenance and Data Awareness in Exploratory Process Mining.
 - *Lars Ackermann, Julian Neuberger, Martin Käppel and Stefan Jablonski.* Bridging research fields: An empirical study on joint, neural relation extraction techniques.
- **Doctorial Consortium (Session 3) & Awards.** *Chaired by Raimundas Matulevicius. ROOM 9*
 - *Carlo A. Bono.* Adaptive filtering strategies for social media streams - Mentors: *Selmin Nurcan and Raimundas Matulevicius.*
 - Keynote: *Xavier Franch.* This crazy little thing called PhD.

17:30 – 18:30

- **SC meeting. ROOM 9**

8:00 – 9:00Registration. **HALL – CONGRESS PALACE****9:00 – 10:30**

- **CAISE'23 Keynote 3.** *Chaired by Oscar Pastor.* **AUDITORIUM**
 - Keynote: *Pnina Soffer.* Theory-guided information systems engineering.

Coffee break (10:30 – 11:00) - ROOM C

11:00 – 12:30

- **Requirements Engineering (Session 13).** *Chaired by Jolita Ralyté.* **ROOM 3 & 4**
 - *Edouard Guégain, Clément Quinton and Amir Taherkordi.* Leave Well Enough Alone: Configuration Optimization with Limited Functional Impact.
 - [Journal First] *Monique Snoeck and Yves Wautelet.* Agile MERODE: a model-driven software engineering method for user-centric and value-based development.
 - [Journal First] *Maria Jose Escalona, Nora Koch and Laura García-Borgoñón.* Lean requirements traceability automation enabled by model-driven engineering.
- **Service-related Approaches (Session 14).** *Chaired by Mārīte Kirikova.* **ROOM 5 & 6**
 - *Tianyu Jiang, Mingyi Liu, Zhiying Tu and Zhongjie Wang.* Identifying and Removing the Ghosts of Reproducibility in Service Recommendation Research.
 - *Min Li, Hanchuan Xu, Xiaofei Xu and Zhongjie Wang.* A Resource-Constrained Multi-level SLA Customization Approach based on QoE Analysis of Large-scale Customers.
 - *Imen Jerbi, Hayet Brabra, Mohamed Sellami, Walid Gaaloul, Sami Bhiri, Boualem Benatallah, Djamel Zeghlache and Olivier Tirat.* Request relaxation based-on provider constraints for a capability-based NaaS services discovery.
- **Research Projects Exhibition.** *Chaired by Jaime Font, José Fabián Reyes and Lorena Arcega.* **ROOM 7 & 8**
 - Human & Society System Engineering:
 - *John Krogstie.* Center for sustainable ICT – CESICT.
 - *Olivier Le Goaër.* Decarbonizing Software with Free and Open Source Software: The ecoCode Project.
 - *Alberto García S., José Fabián Reyes Román, Mireia Costa, Ana León and Oscar Pastor.* Delfos Platform: Information System for the management of genomic variations.
 - *Ana León, José Fabián Reyes Román, Mireia Costa, Alberto García S. and Oscar Pastor.* OGMIOs: An Intelligent System for Supporting Clinical Decisions in Precision Medicine.
 - *Pierluigi Plebani, Ronen Kat, Frank Pallas, Sebastian Werner, Giacomo Inches, Peeter Laud and Rita Santiago.* TEADAL: Trustworthy, Energy-Aware federated Data Lakes along the computing continuum.
 - Discussion.
 - Process Mining & Industry Adoption:
 - *Antonio Filograna, Philipp Martin, Raphael Sturm, Francisco Sanz and Lucía Moreno.* A cloud-based platform to support the policymaking: The case of the DECIDO project.
 - *Simone Agostinelli, Francesca De Luzzi, Michele Manglaviti, Massimo Mecella, Flavia Monti, Fabio Maria Petriccione, Maurizio Mesenzani, Alessandro Pollini, Alice Verioli and Ulderico Amadio.* BinTraWine - Blockchain, Tracking and Tracing solutions for Wine.
 - *Marco Franceschetti, Ronny Seiger, Mauricio Jacobo González González, Enrique Garcia-Ceja, Luis Armando Rodríguez Flores, Luciano García-Bañuelos and Barbara Weber.* ProAmbitlon: Online Process Conformance Checking with Ambiguities Driven by the Internet of Things.
 - *Francesca Zerbato, Lisa Zimmermann, Hagen Völzer and Barbara Weber.* ProMiSE: Process Mining Support for End-Users.
 - *Marco Calamo, Adriano De Franceschi, Gabriele De Santis, Francesco Leotta, Civita Mazzaroppi, Jerin George Mathew, Massimo Mecella, Flavia Monti, Claudio Sabatino, Luca Visani and Marco Visani.* TopKontrol: a monitoring and quality control system for the packaging production.
 - Discussion.
 - Domain Specific Engineering & Modeling:
 - *Ginta Majore, Linas Bukauskas, Stefan Sütterlin and Agnė Brilingaitė.* Advancing Human Performance in Cybersecurity.
 - *Rene Noel, Rosa Velasquez, José Ignacio Panach and Oscar Pastor.* Agile development of Systems from REquirements to Code (SREC).
 - *Beatriz Marín, Tanja E. J. Vos, Monique Snoeck, Ana C. R. Paiva and Anna Rita Fasolino.* ENACTEST project – European Innovation Alliance for Testing Education.
 - *Ulrich Frank and Tony Clark.* Language Engineering for Multi-Level Modeling (LE4MM): A long-term Project to Promote the Integrated Development of Languages, Models and Code.
 - *Giovanni Giachetti, Daniel Catalá, Blanca de Miguel, Conrado Carrascosa, Maria de Miguel and Oscar Pastor.* Music360: Modeling the Value of Music.
 - Discussion

12:30 – 13:00

- **Conference Closing.** *Carlos Cetina and Oscar Pastor.* **ROOM 9**

