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Preface

The 34th edition of the International Conference on Advanced Information Systems Engineering (CAiSE'22) was held in Leuven, Belgium, during June 6–10, 2022. CAiSE'22 was jointly organized by members of the Faculty of Economics and Business of KU Leuven and the Faculty of Economics and Business Administration of Ghent University.

The CAiSE conference continues its tradition as the premiere venue for innovative and rigorous research across the whole spectrum of information systems (IS) engineering with a special emphasis on the theme of “Information systems in the post-COVID era: reconciling the best of both worlds”. During the pandemic we all experienced positive and negative aspects of increased digitization and digitalization in many different areas of our life. In the post-COVID era we should reflect on balancing “going back to normal” with reaping the benefits of what we have learned from our digital experiences. An important challenge is finding the right balance between, for instance, meeting online or face-to-face, or working in the office or remotely. Also, we became increasingly aware of the importance of finding ways to optimize, scale, and ensure a high-quality experience of the many digitized services we use at work and in our daily lives.

The call for papers solicited research papers in the categories of Technical, Empirical, and Exploratory papers, in all areas of IS engineering, including novel approaches to IS engineering; models, methods, and techniques in IS engineering; architectures and platforms for IS engineering; and domain-specific and multi-aspect IS engineering. We received a total of 203 full paper submissions. We followed a five-phase selection process. First, we desk-rejected 29 papers that were clearly out of scope or deviated substantially from the required paper layout and length limitations. Second, we assigned two Program Committee (PC) members to each of the remaining 174 papers. As an outcome of this phase, we rejected 84 papers which ended up with two negative reviews. Third, we assigned a member of the Program Board (PB) as a third reviewer for the remaining 90 papers. Fourth, we conducted an online discussion on these 90 papers and, as a result, we preliminarily accepted 11 papers and rejected 14 papers, retaining 65 papers for further discussion. Fifth, we conducted an online Program Board meeting which confirmed the preliminary decisions made in the previous phase, and resulted in the PB accepting 20 more papers (14 of which were conditionally, all of which were finally accepted after checking that they satisfied the acceptance conditions stated in a meta-review), rejecting 25 other papers, and recommending the remaining 20 papers for presentation at the CAiSE Forum. Summing up, the overall evaluation process of the papers resulted in the selection of 31 papers, which amounted to an acceptance rate of 15%. In addition, we invited for presentation in the program four other papers, selected by the Journal-first Track Program Committee, published in Business & Information Systems Engineering (BISE), Data &

Knowledge Engineering (DKE) and Information System (IS), which are three academic journals with strong ties to the CAiSE conference.

Besides the 12 paper sessions presenting the 31 selected and four invited Journal First papers, the final program included the CAiSE Forum, workshops, the co-located working conferences EMMSAD and BPMDS, tutorials, a PhD consortium, and three keynote talks. Matthew Dennis (TU Eindhoven, the Netherlands) addressed “Digital well-being in the post-pandemic world”, Jef Hooyberghs (VITO, Belgium) discussed “A citizen-driven ecosystem for personal health data”, and Barbara Weber (University of St. Gallen, Switzerland) gave a talk on “The power of events: An IS Engineering perspective”.

We are grateful to the entire team that supported the organization of the conference. We thank in the first place the General Chairs, Monique Snoeck and Frederik Gailly, and the Local Organization Chair, Liesbeth Michiels, for facilitating our work as Program Chairs, and our webmaster, Abdel-Jaouad Aberkane, for the quick updates of the website. We further wish to thank for the fruitful collaboration: the Forum Chairs, Jochen De Weerd and Artem Polyvyanyy; the Workshop Chairs, Estefanía Serral, Jelena Zdravkovic, and Jennifer Horkoff; the Tutorial/Panel Chairs, Yves Wautelet and Saïd Assar; the Doctoral Consortium Chairs, Amy Van Looy, Michael Rosemann and Barbara Weber; the Journal-first Track Chair, Anna Perini; and the Publicity Chairs, Adela Del Rio, Marco Comuzzi, and Arik Senderovich. We believe that together we shaped a strong and varied program for this year’s CAiSE conference. Of course, we thank all Program Committee and Program Board members, who played a fundamental role in the review and selection process. Finally, we would like to extend our sincerest gratitude to all those who served at the event itself as organizers, session chairs, hosts, helping students, technical staff, caterers, and the many others who went above and beyond to ensure that CAiSE continues to provide an engaging and high value forum for scientific exchange and networking within the information systems engineering community, in spite of the challenges posed by the pandemic situation.

CAiSE’22 was organized with the support of KU Leuven, Ghent University, and Springer.

June 2022

Xavier Franch
Geert Poels

In Memory of Janis A. Bubenko jr.



Janis A. Bubenko jr., Professor Emeritus at the Department of Computer and Systems Sciences, Stockholm University, passed away on January 15, 2022. He was one of the founders of the CAiSE conference series, a leader of our research community, and a beloved colleague and friend.

Janis was born 1935 in Riga, Latvia. The family immigrated to Sweden in 1945. During his education at Chalmers University of Technology, Gothenburg, Sweden, in the 1950s, he came into early contact with computers and data processing. In 1973, he received a PhD in Information Systems from the Royal Institute of Technology, Stockholm, Sweden. He was appointed Professor of Computer and Systems Sciences at the University of Gothenburg and Chalmers University of Technology in 1977 and remained there until 1981. In 1981 he was appointed Professor at the Royal Institute of Technology and Stockholm University. In 1984 Janis founded and then led the Swedish Institute for System Development (SISU) with support from the Swedish government and more than 20 businesses and public organizations in Sweden. Several research projects funded by the European Commission were conducted with SISU as a Swedish partner, such as KIWIS, TEMPORA, MILORD, NATURE, and F3.

Janis was the author, co-author, or editor of eight influential textbooks and around 150 research reports and articles covering the areas of information systems development methods, performance analysis of data processing systems, operating systems, databases, conceptual modeling methods, and enterprise modeling. In later years his research focus was on requirements engineering and enterprise modeling methods and tools, which he realized from leading positions in projects funded by the European Commission, such as ELKD, ELEKTRA, RENOIR, and HyperKnowledge.

Janis was actively involved in numerous conferences – as general chair and program chair as well as a member of their Programme Committees. His other international engagements included acting as an expert reviewer by the NSF (National Science

Foundation), the European Commission, and national research foundations (or similar) in the UK, Canada, Australia, Switzerland, Ireland, Latvia, and Austria. He was also the vice president of the VLDB Endowment during 1985–1989 and was its president during 1990–1993. He was a member of ACM, the IEEE Computer Society, and IFIP Working Group 8.1. In 2004 he was appointed ACM Fellow.

In the late 1980s Janis, together with Professor Arne Sølvberg, founded the CAiSE conference which was arranged for the first time in Sweden, in May 1989. The conference turned out to be a great success and the conference is now seen as the key event in the research community of information systems engineering.

After the collapse of the Soviet Union, Janis was among the first academics in the Nordic countries to collaborate with computer scientists in the Baltic states, by inviting researchers to Stockholm and organizing joint projects as well as helping to establish the Baltic Conference on Digital Business and Intelligent Systems. For these contributions he was awarded honorary doctorates from both Riga Technical University (2004) and the University of Latvia (2010).

Janis Bubenko can be regarded as being among the most influential researchers in the field of information systems engineering during the 80s and 90s, both in Sweden and internationally, especially in the Nordic countries. As a teacher and researcher, he was inspiring and supportive. Those who had the privilege of working with Janis remember him as a great role model, colleague, and friend. He was always ready to discuss new ideas and projects and, in these situations, often said “why not?” as a call for joint action. Janis was a warm and generous person who never put himself first. He knew how to enjoy life and had a great sense of humor. An example of his humorous side was the famous singing performance together with Arne Sølvberg at CAiSE conference dinners.

It was with deep sorrow that we received the news of Janis’ passing. He was an important part of our lives, as a colleague, supervisor, role model, project partner, and friend. When the CAiSE and IFIP WG8.1 communities were informed about Janis’ death, many responded with messages full of warm memories and condolences addressed to his wife Karin, daughter Anna, son Mikael, and grandchildren. This shows that Janis touched the lives of many in our community and that he will be truly missed.

June 2022

Colleagues and friends of Janis A. Bubenko jr.

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Contents

Process Mining

Decision Mining with Time Series Data Based on Automatic Feature Generation	3
<i>Beate Scheibel and Stefanie Rinderle-Ma</i>	
Inferring a Multi-perspective Likelihood Graph from Black-Box Next Event Predictors	19
<i>Yannik Gerlach, Alexander Seeliger, Timo Nolle, and Max Mühlhäuser</i>	
Bootstrapping Generalization of Process Models Discovered from Event Data	36
<i>Artem Polyvyanyy, Alistair Moffat, and Luciano García-Bañuelos</i>	
Learning Accurate Business Process Simulation Models from Event Logs via Automated Process Discovery and Deep Learning	55
<i>Manuel Camargo, Marlon Dumas, and Oscar González-Rojas</i>	
Multi-perspective Process Analysis: Mining the Association Between Control Flow and Data Objects	72
<i>Dina Bayomie, Kate Revoredo, and Jan Mendling</i>	

Sustainable and Explainable Applications

Towards Greener Applications: Enabling Sustainable-aware Cloud Native Applications Design	93
<i>Monica Vitali</i>	
Towards Explainable Artificial Intelligence in Financial Fraud Detection: Using Shapley Additive Explanations to Explore Feature Importance.	109
<i>Philipp Fukas, Jonas Rebstadt, Lukas Menzel, and Oliver Thomas</i>	

Tools and Methods to Support Research and Design

Systematic Literature Review Search Query Refinement Pipeline: Incremental Enrichment and Adaptation	129
<i>Maisie Badami, Boualem Benatallah, and Marcos Baez</i>	
A Model-Driven Approach for Systematic Reproducibility and Replicability of Data Science Projects	147
<i>Fran Melchor, Roberto Rodríguez-Echeverría, José M. Conejero, Álvaro E. Prieto, and Juan D. Gutiérrez</i>	

The Aircraft and Its Manufacturing System: From Early Requirements to Global Design.	164
<i>Anouck Chan, Anthony Fernandes Pires, Thomas Polacsek, and Stéphanie Roussel</i>	

Process Modeling

Causal Reasoning over Control-Flow Decisions in Process Models	183
<i>Sander J. J. Leemans and Niek Tax</i>	
Crop Harvest Forecast via Agronomy-Informed Process Modelling and Predictive Monitoring	201
<i>Jing Yang, Chun Ouyang, Güvenç Dik, Paul Corry, and Arthur H. M. ter Hofstede</i>	
Guiding Knowledge Workers Under Dynamic Contexts	218
<i>Zeynep Ozturk Yurt, Rik Eshuis, Anna Wilbik, and Irene Vanderfeesten</i>	

Natural Language Processing Techniques in IS Engineering

Context Knowledge-Aware Recognition of Composite Intents in Task-Oriented Human-Bot Conversations	237
<i>Sara Bouguelia, Hayet Brabra, Boualem Benatallah, Marcos Baez, Shayan Zamanirad, and Hamamache Kheddouci</i>	
Crowdsourcing Syntactically Diverse Paraphrases with Diversity-Aware Prompts and Workflows.	253
<i>Jorge Ramírez, Marcos Baez, Auday Berro, Boualem Benatallah, and Fabio Casati</i>	
A Subject-aware Attention Hierarchical Tagger for Joint Entity and Relation Extraction	270
<i>Yawei Zhao and Xiang Li</i>	

Process Monitoring and Simulation

Estimating Activity Start Timestamps in the Presence of Waiting Times via Process Simulation.	287
<i>Claudia Fracca, Massimiliano de Leoni, Fabio Asnicar, and Alessandro Turco</i>	
Updating Prediction Models for Predictive Process Monitoring	304
<i>Alfonso E. Márquez-Chamorro, Isabel A. Nepomuceno-Chamorro, Manuel Resinas, and Antonio Ruiz-Cortés</i>	

Multi-model Monitoring Framework for Hybrid Process Specifications	319
<i>Anti Alman, Fabrizio Maria Maggi, Marco Montali, Fabio Patrizi, and Andrey Rivkin</i>	

Graph and Network Models

Mining Valuable Collaborations from Event Data Using the Recency-Frequency-Monetary Principle	339
<i>Leen Jookan, Mieke Jans, and Benoît Depaire</i>	
Querying Temporal Property Graphs	355
<i>Landy Andriamampianina, Franck Ravat, Jiefu Song, and Nathalie Vallès-Parlangeau</i>	
A Supervised Learning Community Detection Method Based on Attachment Graph Model	371
<i>Yawei Zhao, Huafeng Yan, and Xueying Zhao</i>	

Model Analysis and Comprehension

Soundness of Data-Aware Processes with Arithmetic Conditions.	389
<i>Paolo Felli, Marco Montali, and Sarah Winkler</i>	
Narration as a Technique to Improve Process Model Comprehension: Tell Me What I Cannot See	407
<i>Banu Aysolmaz, Farida Nur Cayhani, and Hajo A. Reijers</i>	
Analyzing Enterprise Architecture Models by Means of the Meta Attack Language.	423
<i>Adina Aldea and Simon Hacks</i>	

Recommender Systems

Enhancing Semantics-Driven Recommender Systems with Visual Features. . .	443
<i>Mounir M. Bendouch, Flavius Frasincar, and Tarmo Robal</i>	
Assisting Mentors in Selecting Newcomers' Next Task in Software Product Lines: A Recommender System Approach	460
<i>Raul Medeiros and Oscar Diaz</i>	

Conceptual Models, Metamodels and Taxonomies

Towards Interoperable Metamodeling Platforms: The Case of Bridging ADOxx and EMF	479
<i>Dominik Bork, Konstantinos Anagnostou, and Manuel Wimmer</i>	

Services Engineering and Digitalization

Situation Awareness for Autonomous Vehicles Using Blockchain-Based
Service Cooperation 501
*Huong Nguyen, Tri Nguyen, Teemu Leppänen, Juha Partala,
and Susanna Pirttikangas*

How Big Service and Internet of Services Drive Business Innovation
and Transformation 517
Haomai Shi, Hanchuan Xu, Xiaofei Xu, and Zhongjie Wang

Time-Cost Tradeoffs for Composed Services 533
Franziska S. Hollauf, Marco Franceschetti, and Johann Eder

Tutorials

The Anatomy of Conceptual Models 551
Heinrich C. Mayr and Bernhard Thalheim

Engineering Information Systems in Smart Manufacturing 554
Francesco Leotta, Massimo Mecella, and Flavia Monti

Mining and Simulation for Process-Aware Information Systems 557
Fernando Brito e Abreu

Author Index 561