

# CALL FOR PAPERS

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Website: <http://www.is-bmsd.org>

27-29 June  
Fribourg, Switzerland

## BMSD 2022

## 12<sup>th</sup> International Symposium on Business Modeling and Software Design

### Chair:

Dr. Boris Shishkov,  
ULSIT / BAS / IICREST, Bulgaria

### Keynote Lecturer:

Prof. Dr. Hans-Georg Fill,  
University of Fribourg, Switzerland



The symposium is organized by **IICREST**, co-organized by **UNIVERSITY OF FRIBOURG**, and technically co-sponsored by **BPM-D**. Cooperating organizations are: **AUTH** - Aristotle University of Thessaloniki, **TU DELFT** - Delft University of Technology, **CTIT** - the U-Twente Centre for Telematics and Information Technology, **SIKS** - the Nederlands Research School for Information and Knowledge Systems, and **AMAKOTA** Ltd.

BMSD is a leading international discussion and knowledge dissemination forum that brings together Researchers and Practitioners interested in: (i) Modeling in general and in particular - Conceptual Modeling, Goal Modeling, Value Modeling, Business/Enterprise Modeling, Process Modeling, Model-Driven Engineering; (ii) Enterprise Engineering and its relation to Software Generation; (iii) Information Systems Architectures and Design.

In 2022, BMSD will be held in Fribourg, Switzerland, following previous events in Bulgaria (Sofia, 2021), Germany (Berlin, 2020), Portugal (Lisbon, 2019), Austria (Vienna, 2018), Spain (Barcelona, 2017), Greece (Rhodes, 2016), Italy (Milan, 2015), the Grand Duchy of Luxembourg (Luxembourg, 2014), The Netherlands (Noordwijkerhout, 2013), Switzerland (Geneva, 2012), and Bulgaria (Sofia, 2011).

We welcome paper submissions from but not limited to the following areas and topics:

### 1. BUSINESS PROCESSES & ENTERPRISE ENGINEERING

enterprise systems  
enterprise system environments and context  
construction and function  
actor roles  
signs and affordances  
transactions  
business processes  
business process coordination  
business process optimization  
business process management and strategy execution  
production acts and coordination acts  
regulations and business rules  
enterprise (re-) engineering  
enterprise interoperability  
inter-enterprise coordination  
enterprise engineering and architectural governance  
enterprise engineering and software generation  
enterprise innovation

### 2. BUSINESS MODELS AND REQUIREMENTS

essential business models  
re-usable business models  
business value models  
business process models  
business goal models  
integrating data analytics in business modeling  
semantics and business data modeling  
pragmatics and business behavior modeling  
business modeling viewpoints and overall consistency  
business modeling landscapes  
requirements elicitation  
domain-imposed and user-defined requirements  
requirements specification and modeling  
requirements analysis and verification  
requirements evolution  
requirements traceability  
usability and requirements elicitation

### 3. BUSINESS MODELS AND SERVICES

enterprise engineering and service science  
service-oriented enterprises

from business modeling to service-oriented solutions  
business modeling for software-based services  
service engineering  
business-goals-driven service discovery and modeling  
technology-independent and platform-specific service modeling  
re-usable service models  
business-rules-driven service composition  
web services  
autonomic service behavior  
context-aware service behavior  
service interoperability  
change impact analysis and service management  
service monitoring and quality of service  
services for IoT applications  
service innovation

### 4. BUSINESS MODELS AND SOFTWARE

enterprise engineering and software development  
model-driven engineering  
co-design of business and IT systems  
business-IT alignment and traceability  
alignment between IT architecture and business strategy  
business strategy and technical debt  
business-modeling-driven software generation  
normalized systems and combinatorial effects  
software generation and dependency analysis  
component-based business-software alignment  
objects, components, and modeling patterns  
generic business modeling patterns and software re-use  
business rules and software specification  
business goals and software integration  
business innovation and software evolution  
software technology maturity models  
domain-specific models  
crosscutting concerns - security, privacy, distribution, recoverability, logging, performance monitoring

### 5. INFORMATION SYSTEMS ARCHITECTURES & PARADIGMS

enterprise architectures  
service-oriented computing  
software architectures  
cloud computing

autonomic computing (and intelligent software behavior)  
context-aware computing (and adaptable software systems)  
affective computing (and user-aware software systems)  
aspect-oriented computing (and non-functional requirements)  
architectural styles  
architectural viewpoints

### 6. DATA ASPECTS IN BUSINESS MODELING & SOFTWARE DEVELOPMENT

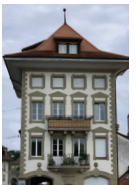
data modeling in business processes  
data flows and business modeling  
databases, OLTP, and business processes  
data warehouses, OLAP, and business analytics  
data analysis, data semantics, redundancy, and quality-of-data  
data mining, knowledge discovery, and knowledge management  
information security and business process modeling  
categorization, classification, regression, and clustering  
cluster analysis and predictive analysis  
ontologies and decision trees  
decision tree induction and information gain  
business processes and entropy  
machine learning and deep learning - an enterprise perspective  
uncertainty and context states  
statistical data analysis and probabilistic business models

### 7. BLOCKCHAIN-BASED BUSINESS MODELS & INFORMATION SYSTEMS

smart contracts  
blockchains for business process management  
blockchain schemes for decentralization  
the blockchain architecture - implications for systems and business processes  
blockchains and the future of enterprise information systems  
blockchains and security / privacy / trust issues

### 8. IOT AND IMPLICATIONS FOR ENTERPRISE INFORMATION SYSTEMS

the IoT paradigm  
IoT data collection and aggregation  
business models and IoT  
IoT-based software solutions  
IoT and context-awareness  
IoT and public values  
IoT applications: smart cities, e-Health, smart manufacturing.



### Key dates

Paper submission deadline: **18 April 2022 (extended)**  
Notification of acceptance: **25 April 2022**  
Final paper submission: **3 May 2022**

### Types of contributions

Regular Papers - presenting research that is completed or almost finished  
Position Papers - presenting an arguable opinion about and issue  
Invited Papers - submitted by best paper authors and BMSD former/future Keynotes

### Paper formats

Full Papers - 18-page limit in the Springer LNBP proceedings (oral presentation)  
Short Papers - 10-page limit in the Springer LNBP proceedings (oral presentation)  
Posters - 4 page limit (not included in the Springer LNBP proceedings)

### How to submit a paper (7 steps)

1. View the technical scope; 2. Prepare a contribution of no less than 4 and no more than 12 pages (Springer LNCS format); 3. Decide whether you are submitting your contribution as a Regular Paper or as a Position Paper; 4. Do paper formatting, using the provided templates (<http://www.is-bmsd.org>); 5. Remove your names and the names of your co-authors (and also your affiliations) from the title and references sections; 6. Save the file as PDF; 7. e-Mail the file to: [secretariat@iicrest.org](mailto:secretariat@iicrest.org) by the 18th of April, putting in the Subject: "BMSD 2022, Regular/Position Paper".

### Publication

Accepted papers will be presented at BMSD 2020; Full Papers and Short Papers will be included in the symposium proceedings, published by Springer (LNBPN - Q3, SJR 0.21), and indexed by SCOPUS, Web of Science, and DBLP.



### Proceedings of previous editions

2021 <https://www.is-bmsd.org/Documents/ProceedingsOfEleventhBMSD.pdf>  
2020 <https://link.springer.com/book/10.1007/978-3-030-52306-0>  
2019 <https://www.is-bmsd.org/Documents/ProceedingsOfNinthBMSD.pdf>  
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2011: <http://www.is-bmsd.org/Documents/ProceedingsOfFirstBMSD.pdf>

### Venue

The BMSD sessions will be held at Auditoire A120 of University of Fribourg. Fribourg is a special place at the cultural border of the German-speaking and French-speaking parts of Switzerland.

### For more information

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