

Lecture Notes in Business Information Processing

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Business Process Management Workshops

BPM 2018 International Workshops
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Revised Papers

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Foreword

This volume contains the proceedings of the workshops held on September 10, 2018, in conjunction with the 16th International Conference on Business Process Management (BPM 2018), which took place in Sydney, Australia. The proceedings are so-called post-workshop proceedings, as the authors were allowed to revise and improve their papers after the actual workshops to take into account the feedback obtained from the audience during their presentations.

Due to its interdisciplinary nature that naturally involves researchers and practitioners alike, the BPM conference has traditionally been perceived as a premium event for co-locating workshops with. The 2018 edition of the conference was no exception: Its call for workshop proposals attracted a good number of workshop proposals with topics ranging from traditional BPM concerns like requirements engineering and business process mining to emerging topics like data science and artificial intelligence. The following eight workshops were selected for co-location with BPM 2018:

- 14th International Workshop on Business Process Intelligence (BPI) – organized by Boudewijn van Dongen, Jan Claes, Jochen De Weerd, Andrea Burattin.
This year’s BPI Workshop focused particularly on process mining in the context of big data. The workshop has a long tradition at the BPM conference and, as before, featured: the presentation of interesting research papers in the BPI domain; the BPI Challenge 2018, with data provided by the German company Data Experts; the IEEE Task Force meeting; and the Process Mining Reception.
- 11th Workshop on Social and Human Aspects of Business Process Management (BPMS2) – organized by Rainer Schmidt, Selmin Nurcan.
BPMS 2018 explored how social software interacts with business process management, how business process management has to change to comply with weak ties, social production, egalitarianism and mutual service, and how business processes may profit from these principles. Furthermore, the workshop investigated human aspects of business process management such as new user interfaces, e.g., augmented reality and voice bots.
- First International Workshop on Process-Oriented Data Science for Health Care (PODS4H) – organized by Jorge Munoz-Gama, Carlos Fernandez-Llatas, Niels Martin, Owen Johnson.
PODS4H 2018 aimed at providing a high-quality forum for interdisciplinary researchers and practitioners (both data/process analysts and medical audience) to exchange research findings and ideas on health-care process analysis techniques and practices. PODS4H research includes a wide range of topics from process mining techniques adapted for health-care processes, to practical issues on implementing PODS methodologies in health-care centers’ analysis units.
- First International Workshop on Artificial Intelligence for Business Process Management (AI4BPM) – organized by Richard Hull, Riccardo De Masellis, Krzysztof Kluza, Fabrizio Maria Maggi, Chiara Di Francescomarino.

The goal of AI4BPM was to establish a forum for researchers and professionals interested in understanding, envisioning, and discussing the challenges and opportunities of moving from current, largely programmatic approaches for BPM, to emerging forms of AI-enabled BPM. The workshop represents the union of two workshops held at BPM 2017, namely, Business Process Innovation with Artificial Intelligence (BPAI) and Cognitive Business Process Management (CBPM).

- First International Workshop on Emerging Computing Paradigms and Context in Business Process Management (CCBPM) – organized by Jianmin Wang, Michael Sheng, Shiping Chen, Xiao Liu, James Xi Zheng.

The goal of CCBPM 2018 was to promote the role of emerging computing paradigms such as mobile-cloud computing, edge/fog computing, and context in business process management (BPM) by discussing what opportunities and challenges the emerging computing paradigms and context-aware technologies can bring to BPM, and what are the novel use cases and state-of-the-art solutions.

- Joint Business Processes Meet the Internet-of-Things/Process Querying Workshop (BP-Meet-IoT/PQ) – organized by Agnes Koschmider, Massimo Mecella, Estefanía Serral, Victoria Torres, Artem Polyvyanyy, Arthur ter Hofstede, Claudio Di Ciccio. This joint BP-Meet-IoT/PQ Workshop brought together practitioners and researchers interested in IoT-based business processes (state of ongoing research, industry needs, future trends, and practical experiences) and process querying (automated methods for the inquiry, manipulation, and update of models and data of observed and envisioned processes).

- First Declarative/Decision/Hybrid Mining and Modeling for Business Processes (DeHMiMoP) – organized by Claudio Di Ciccio, Jan Vanthienen, Tijs Slaats, Dennis Schunselaar, Sören Debois.

DeHMiMoP aimed at providing a platform for the discussion, introduction, and integration of ideas related to the decision and rule perspectives on process modeling and mining. The objectives were to extend the reach of the BPM audience toward the decisions and rules community, and increase the integration between imperative, declarative, and hybrid modeling perspectives.

- Joint Requirements Engineering and Business Process Management Workshop/Education Forum (REBPM/EdForum) – organized by Banu Aysolmaz, Rüdiger Weißbach, Onur Demirörs, Fethi Rabhi, Wasana Bandara, Helen Paik, Cesare Pautasso.

This joint workshop brought together practitioners and researchers interested in requirements engineering and education in BPM. The focus of the workshop was on the interrelations between RE and BPM domains with a focus on agile and flexible BPM, and on effective education and training methods for developing BPM professionals.

The selected workshops formed an extraordinary and balanced program of high-quality events. We are confident the reader will enjoy this volume as much as we enjoyed organizing this outstanding program and assembling its proceedings.

Of course, we did not organize everything on our own. Many people from the BPM 2018 Organizing Committee contributed to the success of the workshop program. We would particularly like to thank the general chairs of BPM 2018, Boualem Benatallah and Jian Yang, for involving us in this unique event, the local organizers for the smooth management of all on-site issues, the workshop organizers for managing their workshops and diligently answering the numerous of e-mails we sent around, and, finally, the authors for presenting their work and actually making all this possible.

November 2018

Florian Daniel
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