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Business Process Management

Blockchain and Robotic Process Automation Forum

BPM 2020 Blockchain and RPA Forum
Seville, Spain, September 13–18, 2020
Proceedings

Springer

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Preface

This volume contains the proceedings of the Blockchain Forum and the Robotic Process Automation (RPA) Forum, which took place during the week of September 13–18, 2020. Both of the forums were organized as part of the 18th International Conference on Business Process Management (BPM 2020). Due to the COVID-19 pandemic, the main conference itself and most of its associated events were held virtually. The authors of the blockchain papers that appear in these proceedings presented their work to a virtual audience and engaged in online discussions with peers, practitioners, students, and others. The RPA Forum was organized in a hybrid form: Presenters had the opportunity to join online or *in situ*, in Seville, Spain. As part of the RPA Forum, additional industrial demonstrations and a panel were organized. Moe Wynn of Queensland University of Technology, Australia, gave the keynote talk at the RPA Forum.

The Blockchain Forum and the RPA Forum have in common that they are centered around an emerging and exciting technology. Blockchain is a sophisticated distributed ledger technology, while RPA software allows for mimicking human, repetitive actions. Each of these have the potential to fundamentally change how business processes are being orchestrated and executed in practice. The BPM community has embraced these technologies as objects of analysis, design, development, and evaluation. The forums were also created to allow for a discussion with researchers from other fields who share their interest in these technologies, whether this is from an economic, sociological, business, mathematical, or other viewpoint. The Blockchain Forum took place for the second time, after its first successful appearance at BPM 2019 in Vienna. The RPA Forum made its debut this year at BPM 2020.

In the spring of 2020, when the deadlines for paper submissions to the forums expired, it was not clear how – if at all – these events would take place. At that time, parts of the world were already suffering from the spread of COVID-19. Despite the uncertainty, both events received a fair amount of submissions by author teams from a wide range of institutes and countries. The Blockchain Forum received 10 papers of which the top 5 were accepted as full papers; the RPA Forum even received 18 submissions, which led to the acceptance of the top 9 as full papers. Given the 50% acceptance for each of the events, this rate applies to these proceedings as a whole. In addition, one submission to the RPA Forum was accepted as a short paper because of its promising nature and timely contribution. For both forums, each submission was reviewed by at least three members of the respective Program Committees.

We hope that the reader of these proceedings will enjoy the versatility of the included papers, as well as the creativity that the authors put into their work. Many of the papers present fresh perspectives, which we expect to shape how the involved technologies will evolve over time and how they will be applied in practice. We would like to thank the authors for submitting and presenting their work. We are also grateful to our colleagues who served as reviewers in the screening process and provided the

authors with meaningful and constructive feedback. We want to explicitly acknowledge the effort of Appian and MCCM Innovations for their contribution to the RPA Forum: they provided an industrial perspective on RPA by demonstrating how the technology is applied in practice. Finally, we are indebted to all the people from the BPM 2020 team, who supported us and created the setting for both events. Without their help, these forums would not have taken place.

July 2020

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Organization

The 18th International Conference on Business Process Management (BPM 2020) was organized by the Research Group of Applied Software Engineering (ISA Group) at the University of Seville, Spain, with the collaboration of SCORE Lab and the Instituto de Investigación en Ingeniería Informática (I3US). It took place online due to the restrictions imposed because of the COVID-19 pandemic. Originally, it was going to take place in Seville, Spain. The Blockchain Forum and the Robotic Process Automation (RPA) Forum were co-located with the main conference, which took place during September 13–18, 2020.

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