

Preface of the 15th International Workshop on Models@run.time'21

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Abstract—After a break in 2020, this year the 15th edition of the workshop Models@run.time is held at the 24th International Conference on Model Driven Engineering Languages and Systems. The workshop takes place virtually due to the Covid-19 pandemic on the 11th of October 2021. The workshop is organized by Sebastian Götz, Antonio Bucchiarone and Nelly Bencomo. Here, we present some highlights of the workshop.

Index Terms—runtime models, causal connection, digital twins, self-adaptation

I. SUMMARY

Once more, the models@run.time community [1]–[4] meet at the MODELS conference and discuss the newest research initiatives and tendencies in our field. After a break in 2020, the workshop series is now continued.

Compared with previous editions of our workshop in MODELS, the number of submissions was not very high. This is logical as the field has matured and authors also submit their work to conferences and journals. Still, the workshop is required and used by the community as a meeting place to discuss early ideas and future directions of the field, which is reflected in a steady high participation. Research paradigms for fields related to Digital Twins and Robotics can get benefits from the use of runtime models, and as such further research is needed. This year, we received 6 submissions of which 4 were accepted for presentation at the workshop.

We hope that you enjoy the Models@run.time'21 workshop and its proceedings. We look forward to seeing you all at this workshop and the future editions. We are very grateful to the Program Committee members and authors of the submissions for their hard work and dedication in putting together this program. We would like to thank you all for your participation in the workshop Models@run.time'21. We hope that you find this workshop fruitful and inspiring!

II. ACCEPTED PAPERS

This year, we accepted 3 full papers and one short paper.

- *Process Prediction with Digital Twins* by Tobias Brockhoff, Malte Heithoff, István Koren, Judith Michael, Jérôme Pfeiffer, Bernhard Rumpe, Merih Seran Uysal, Wil M. P. van der Aalst and Andreas Wortmann.
- *GOURMET: A Methodology for Realizing Goal-Driven Self-Adaptation* by Anton V. Uzunov, Mohan Baruwal Chhetri and John Wondoh.

- *Model Based Coupling of Context Aware Middleware and Ambient Assisted Healthcare Systems* by Vladimir A. Shekhovtsov, Claudia Steinberger and Christian Kop.
- *Procrustes: Consistent Resource Utilization for Cross-Platform Replicable Load Testing* by Harry McCarthy, Vladimir Podolskiy, Michael Gerndt and Panos Patros as short paper.

III. PROGRAM COMMITTEE

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