Preliminary Proceedings

»PNSE'17«

International Workshop on

Petri Nets and Software Engineering

Satellite event of the

38th International Conference on Application and Theory of Petri Nets and Concurrency

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17th International Conference on Application of Concurrency to System Design

Zaragoza, Spain, June, 2017

Including the proceedings of the co-located event

»MoSEBIn'17«

International Workshop on

Modeling and Software Engineering in Business and Industry

Editors: Daniel Moldt,
Lawrence Cabac and
Heiko Rölke

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Prefaces

These are the proceedings of the International Workshop on *Petri Nets and Software Engineering* (PNSE'17) in Zaragoza, Spain, June 25–26, 2017 which also includes the papers of the International Workshop on *Modeling and Software Engineering in Business and Industry* (MoSEBIn'17). Both workshops are co-located events of

- *Petri Nets 2017* – the 38th International Conference on Applications and Theory of Petri Nets and Concurrency and
- *ACSD 2017* – the 17th International Conference on Application of Concurrency to System Design.

More information about the workshop can be found at

`http://www.informatik.uni-hamburg.de/TGI/events/pnse17/`
and
`http://www.informatik.uni-hamburg.de/TGI/events/mosebin17/`

PNSE'17 preface:

For the successful realization of complex systems of interacting and reactive software and hardware components the use of a precise language at different stages of the development process is of crucial importance. Petri nets are becoming increasingly popular in this area, as they provide a uniform language supporting the tasks of modeling, validation and verification. Their popularity is due to the fact that Petri nets capture fundamental aspects of causality, concurrency, synchronization and choice in a natural and mathematically precise way without compromising readability. The use of Petri nets (P/T-nets, Coloured Petri nets and extensions) in the formal process of software engineering, covering modeling, validation, execution, simulation and verification, is presented as well as their application in several domains and tools supporting the disciplines mentioned above.

MoSEBIn'17 preface:

The workshop is a forum for those interested in modeling, especially of, for and within business and industry environments. Business and industry environments are important and relevant application domains for modeling and software engineering. Both academics and practitioners can contribute and learn from such a meeting. The fundamental interest is to understand modeling within this area and what environments and applications actually demand from modelers and software engineers.

Communication between users and software engineers is based on models, therefore, the transformation from application domain models to computer science is a major task that we want to discuss during the workshop from many perspectives. Furthermore, software engineering for business and industry has to provide solutions that have to fit special needs of the people in these fields.

The mutual dependencies, services, requirements, expectations, solutions etc. between software engineers and business people / people from industry shall be discussed during the workshop.

Last but not least in the context of any organisational institution the roles of modeling within software engineering and how to use software engineering for modeling can also be addressed from various perspectives.

For both workshops we have chosen José Ángel Bañares and Julia Padberg as invited speakers. We received eighteen high-quality contributions for these proceedings. The program now consists of ten full papers, two short papers, three poster contributions and two invited talks.

The international program committee of PNSE'17 was supported by the valued work of Alfredo Capozucca, Stefan Klikovits, Artur Niewiadomski, Marcin Piątkowski and Benoît Ries as additional reviewers. Their valuable work is highly appreciated.

Furthermore, we would like to thank our colleagues in the local organization team at the Aragón Institute of Engineering Research (I3A), Zaragoza University, Spain for their support.

The organzational/technical work in Hamburg was supported by Louis Kobras, Michael Haustermann and Dennis Schmitz.

Without the enormous efforts of authors, reviewers, PC members and the organizational teams, this workshop would not provide such an interesting booklet.

Thank you very much!

Danial Moldt, Lawrence Cabac, Heiko Rölke
Hamburg, June 2017

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