PNSE'19

International Workshop on Petri Nets and Software Engineering
Aachen, Germany, June 24-25, 2019

a satellite event of
Petri Nets 2019, ACSD 2019 and Process Mining 2019

40th INTERNATIONAL CONFERENCE ON APPLICATION AND THEORY OF PETRI NETS AND CONCURRENCY,
19th INTERNATIONAL CONFERENCE ON APPLICATION OF CONCURRENCY TO SYSTEM DESIGN
and
1st INTERNATIONAL CONFERENCE ON PROCESS MINING

More information: Conference Site
Contact e-mail: pnse19_at_informatik_dot_uni-hamburg_dot_de

Call for Papers for PNSE'19

Important Dates:

<table>
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<tr>
<th>Deadline for full papers:</th>
<th>March</th>
<th>30th, 2019</th>
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<tr>
<td>Deadline for short papers:</td>
<td>March</td>
<td>30th, 2019</td>
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<td>Notification of paper acceptance:</td>
<td>April</td>
<td>25th, 2019</td>
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<td>Deadline for posters:</td>
<td>April</td>
<td>27th, 2019</td>
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<td>Notification of poster acceptance:</td>
<td>April</td>
<td>28th, 2019</td>
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<td>Deadline for final revisions:</td>
<td>April</td>
<td>30th, 2019</td>
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Some of the best papers from the workshop will be invited for publication in a volume of the journal sub line of Lecture Notes in Computer Science entitled Transactions on Petri Nets and Other Models of Concurrency (ToPNoC). The papers are expected to be thoroughly revised and they will go through a totally new round of reviewing as is standard practice for journal papers.

Papers from previous instances of this workshop (PNSE’07, PNDS’08, PNSE’09, PNSE’10, PNSE’11, PNSE’12, PNSE’13, PNSE’14, PNSE’15, PNSE’16, PNSE’17 and PNSE’18) made it into ToPNoC volumes in the Springer LNCS series (volumes 5100, 5460, 5800, 6550, 6900, 7400, 8000).
Scope

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, simulation, validation, and verification. Their popularity is due to the fact that Petri nets capture fundamental aspects of causality, concurrency and choice in a natural and mathematically precise way without compromising readability.

The workshop PNSE’19 (Petri nets and Software Engineering) will take place as a satellite event of Petri Nets 2019 and ACSD 2019. The use of Petri nets (P/T-nets, colored Petri nets and extensions) in software engineering, covering modeling, validation, and verification, will be presented as well as their application and tools supporting the disciplines mentioned above.

This year we will put an emphasize on the impact of software engineering in general and its model based development on Petri nets by their concepts, methods, techniques and tools. Therefore we especially invite contributions that work on subjects that could(!) be relevant for Petri nets, their applications or their tools. Results on other formalisms or semi-formal techniques, their concepts, methods, tools and experiences (successful or not successful) are highly welcome.

As model based development has proven to be very successful, we want to discuss ideas, applications, concepts, foundations and recent results from the area of modeling during the workshop. Communication is based on models, therefore, the transformation from domain models to software models and back are major tasks that we want to discuss during the workshop from several perspectives. Last but not least, in the context of any organizational institution, the roles of modeling and how to use concepts, methods or tools for modeling may be addressed.

The idea is to inspire the Petri nets community with new ideas, insights, relevant concepts, etc. In case that you still have doubts if your contribution will fit: Just contact the PC-Chairs!

Topics

We welcome contributions describing original research in topics from Petri nets, software engineering or modeling. Topics of interest include but are not limited to:

- Software Engineering
  agile development
  product lines
  software development and production environments; DevOps; IDEs; continuous integration
  programming and concurrency
  technologies: hadoop / MapReduce; akka, Spark; Flink; STORM etc.
  distributed database technology: redis; cassandra; CouchDB; hadoop; mongoDB etc.
  concepts for mobility, concurrency, non-determinism, distribution, embedding, flexibility
  social concepts for norms, rules, contracts, communication, co-ordination, co-operation
  software engineering addressing Petri nets, UML techniques, BPMN, BPEL, eEPCs, CMMN and other modeling techniques

- Petri nets
  validation, execution, simulation, observation, animation, code generation, testing, debugging, implementation and prototyping
  verification, behavioral and structural methods, state space based approaches, model checking
  process mining
  assertional and deductive methods (e.g. temporal logics)
  process algebraic methods

- Modeling
  modeling technique variants and their semantics
  foundations and basic concepts covering concepts such as concurrency, non-determinism, correctness, mobility, distribution etc.
  evaluation of modeling languages, techniques, methods and tools
  patterns for models and for modeling
  collaborative modeling research
  domain specific languages
  syntax, semantics and pragmatics of modeling and its languages
  model and graph transformation

- Applications in the domains of
education, training and teaching at any level, flexible manufacturing, logistics, telecommunication, big data, cyber-physical systems, internet-of-things, grid and cloud computing, distributed systems, Internet of Things and Industry 4.0, Smart Cities and Social Networks, distributed software development, workflow management and embedded systems.

- Tools, case studies, usability studies and applications in the fields mentioned above

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**Proceedings**

We plan to make the workshop proceedings for PNSE’19 available online at CEUR (available from July, 2019.). Some former volumes of the workshop can found at:

- CEUR-WS.org as Volume 2138
- CEUR-WS.org as Volume 1846
- CEUR-WS.org as Volume 1591
- CEUR-WS.org as Volume 1372
- CEUR-WS.org as Volume 1160
- CEUR-WS.org as Volume 989
- CEUR-WS.org as Volume 851 and
- CEUR-WS.org as Volume 723.

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**Invited Speakers**

**Jan Mendling** (Austria)

**Quotients for Behaviour Comparisons: Monotone Precision and Recall Measures for Process Mining**

**Abstract**

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**Hans Vangheluwe** (Belgium)

TBA

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**Program committee**

- Robin Bergenthum (Germany)
- Piotr Chrząstowski-Wachtel (Poland)
- Gianfranco Ciardo (USA)
- José-Manuel Colom (Spain)
- Benoît Combemale (France)
- Juan de Lara (Spain)
- Esther Guerra (Spain)
- Serge Haddad (France)
- Thomas Hildebrandt (Denmark)
- Ekkart Kindler (Denmark) (Co-Chair)
- Maciej Koutny (United Kingdom)
- Lars Kristensen (Norway)
- Heinrich Mayr (Austria)
- Jan Mendling (Austria) (Co-Chair)
- Daniel Moldt (Germany) (Co-Chair)
Submissions

(The call for papers is also available as [PDF] or [TXT] document.)

The program committee invites submissions of full contributions (15 up to 20 pages) or short contributions (5 up to 8 pages). Ongoing work (up to 2 pages) can also be presented in a special poster session.

Papers should be submitted in electronic form (PDF) using the Springer LNCS-format (see http://www.springer.de/comp/lncs/authors.html). Submissions should include title, authors' addresses, E-mail addresses, keywords and an abstract. For your submission in PDF format please use the online conference management system at https://easychair.org/conferences/?conf=pnse19

Just create a new account and then upload your paper. (Later you will be able to see your reviews there.)

The papers will be peer reviewed by at least three members of the PC. Accepted contributions will be included in the workshop proceedings, which will be available at the workshop and published online.

In case of any problems please contact us by email at pnse19_at_informatik_dot_uni-hamburg_dot_de.

Submission Guidelines

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Registration & Accommodation

Please register for the PNSE’19 workshop at the Petri Nets 2019 Registration site.

Information about hotels and about how to reach the workshop / conference site can be found at the Petri Nets 2019 Accommodation page and Petri Nets 2019 Venue page.

For further information on PNSE’19 contact the program committee by email at pnse19_at_informatik_dot_uni-hamburg_dot_de