CALL for PAPERS

Workshop PNSE'97

Petri Nets in System Engineering

Modelling, Verification, and Validation

Hamburg, Germany, September 25–26, 1997

For the successful realisation 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 modelling, validation and verification. Their popularity is due to the fact that fundamental aspects of causality, concurrency and choice are captured by Petri nets in a natural and mathematically precise way without compromising readability.

The workshop PNSE'97 (Petri nets in System Engineering) will take place at the University of Hamburg on September 25–26. The workshop is organized by the members of the European community project MATCH (Modelling and Analysis of Time Constrained and Hierarchical Systems). Project partners include the universities of Eindhoven, Genova, Hamburg, Paris, Turin, Vienna, and Zaragoza.

Scope: The use of Petri nets (P/T-nets, coloured nets and extensions) in the formal process of System Engineering, covering modelling, validation and verification, is studied as well as the application to selected domains including flexible manufacturing, logistics, telecommunication and workflow management. Additional interest lies in tools supporting the disciplines mentioned above.

Topics: Contributions describing original research in topics related to Petri nets and surveys addressing open problems and new applications of Petri nets are being sought. Topics of interest include but are not limited to:

- Modelling
  - representation of formal models by intuitive modelling concepts
  - guidelines for the construction of system models
  - representative examples
  - state-, event-, and object-oriented approaches
  - adaption, integration, and enhancement of concepts from other disciplines
  - views and abstractions of systems
- Validation and Execution
  - prototyping
  - simulation, observation, animation
  - code generation and execution
  - testing and debugging
  - efficient implementation
- Verification
  - structural methods (e.g. place invariants, reduction rules)
  - results for structural subclasses of nets
  - relations between structure and behaviour
  - state space based approaches
  - efficient model checking
  - assertional and deductive methods (e.g. temporal logics)
  - process algebraic methods
  - applications of category theory and linear logic
- Application of Petri nets in System Engineering, in particular the use of Petri nets in the domains flexible manufacturing, logistics, telecommunication and workflow management.
- Tools in the fields mentioned above.

Program Team:

Wil van der Aalst (Eindhoven Univ. of Technology, Netherlands), José-Manuel Colom (Univ. Zaragoza, Spain), Susanna Donatelli (Univ. Turin, Italy), Fabrice Kordon (Univ. P. et M. Curie-CNRS 4, Paris, France), Gabriela Kotsis (Univ. Vienna, Austria), Daniel Moldt (Univ. Hamburg, Germany)

Local Organizing Team:

Berndt Farwer, Daniel Moldt, Mark-Oliver Stehr (all: Univ. Hamburg)

Submission of Contributions: The program team invites submissions of contributions (10 pages). E-mail submissions (in postscript or plain text) are encouraged. Please submit to `pnse97@informatik.uni-hamburg.de`. Hard copy submissions are also accepted and should be sent to the chairperson of the program team:

Daniel Moldt
University of Hamburg
Dept. of Computer Science
Vogt-Kölln-Str. 30
D-22527 Hamburg
Germany

Deadline for submissions: **July 30, 1997**
Notification of acceptance: **August 30, 1997**

Camera-ready copies of the full paper are due shortly after notification of acceptance to ensure availability to participants of the workshop. Presented contributions will be published as proceedings in the report series of the Dept. of Computer Science of the University of Hamburg. Papers passing a particular review are planned to be included in a special issue of a journal or a book.

For further information about PNSE'97 contact the local organizing team by email at `pnse97@informatik.uni-hamburg.de` or see `http://www.informatik.uni-hamburg.de/TGI/aktuelles/pnse97.html`.