

3.11.2010

1. Axiomatische Semantik aus historischer Sicht.

Marcell Dietz, Georg Notter

```
@article{naur,  
  Author = {P. Naur},  
  Journal = {BIT},  
  Pages = {310-316},  
  Title = {Proof of Algorithms by General Snapshots.},  
  Volume = {6},  
  Year = {1966}}  
  
@inproceedings{Floyd67,  
  Author = {Robert W. Floyd},  
  Booktitle = {Proceedings of the AMS Symposium on Applied Mathematics},  
  Pages = {19-31},  
  Publisher = {American Mathematical Society},  
  Title = {Assigning meanings to programs},  
  Volume = {19},  
  Year = {1967}}  
  
@article{hoare69,  
  Author = {C.A.R. Hoare},  
  Journal = {Comm. ACM},  
  Title = {An axiomatic approach to computer programming.},  
  Volume = {12},  
  Year = {1969}}
```

siehe auch:

<http://www.informatik.uni-hamburg.de/TGI/lehre/vl/WS1011/FGI3/index.html>

Folien zu Kapitel 2/Teil1

10.11.2010

2. Verifikation des Bounded-Retransmission-Protokols durch Prozessalgebra und Prozessalgebra-Tools.

Julian Scheel, Dominik Formella

@book{BOFOKK99,
Author = {Wan Fokkink},
Publisher = {Springer-Verlag},
Title = {Introduction to Process Algebra},
Year = {1999}}

Section 6.2

17.11.2010

3. Verteilte Algorithmen: Kürzeste Wege in Netzwerken

Janina Nemeč, Oliver Bestmann, Hannes Kuhlmann

G. Tel: Introduction to Distributed Algorithms

Chapter 4: Routing Algorithms

http://www.amazon.de/Introduction-Distributed-Algorithms-Gerard-Tel/dp/0521794838/ref=sr_1_fkmr2_1?ie=UTF8&qid=1287741253&sr=8-1-fkmr2

24.11.2010

4. Verteilte Algorithmen: Gerüste in Netzwerken

Ednard Chuvanjin, Johannes Stüber

A Distributed Spanning Tree Algorithm

**Karl Erik Johansen, Ulla Lundin Jørgensen, Svend Hauge Nielsen,
Søren Erik Nielsen and Sven Skyum
Computer Science Department, Aarhus University,
DK-8000 Aarhus C, Denmark**

in: Distributed Algorithms: 2nd International Workshop, Amsterdam, the ... Von Jan van Leeuwen, LNCS 312
siehe:

http://books.google.de/books?id=D8lwb0G5aKAC&pg=PA1&lpg=PA1&dq=Johansen,Distributed+Alg,+spanning+tree&source=bl&ots=F-5S2Op0YE&sig=h5qsR5rXuaq4jPVh3mKStCctKxI&hl=de&ei=TWbBTOfkContsga7rbDTCA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CBcQ6AEwAA#v=onepage&q&f=false

Robert G. Gallager, Pierre A. Humblet, and P. M. Spira, "A distributed algorithm for minimum-weight spanning trees," ACM Transactions on Programming Languages and Systems, vol. 5, no. 1, pp. 66–77, January 1983

1.12.2010
5. Term-Ersetzungs-Systeme

Stefan Rode, Markus Jansen

@book{BaNi98,
 Author = {F. Baader and T. Nipkow},
 Publisher = {Cambridge University Press},
 Title = {Term Rewriting and All That},
 Year = {1998}}

R. Valk, Vorl. "Semantik von Programmen", WiSe 2007

8.12.2010

6. Rekursion in Petrinetzen

Hendrik Linne, Nikolas Slotke, Sheng Tooran

```
@InProceedings{Haddad99,  
  author = "Serge Haddad and Denis Poitrenaud",  
  editor = "{Donatelli, Susanna} and {Kleijn, Jetty}",  
  title = "Theoretical Aspects of Recursive Petri Nets.",  
  booktitle = "Lecture Notes in Computer Science: Application and  
    Theory of Petri Nets 1999, 20th International  
    Conference, ICATPN'99, Williamsburg, Virginia, USA",  
  volume = "1630",  
  pages = "228--247",  
  publisher = "Springer-Verlag",  
  month = jun,  
  year = "1999",  
  abstract = "The model of recursive Petri nets (RPNs) has been  
    introduced in the field of multi-agent systems in order  
    to model flexible plans for agents. In this paper we  
    focus on some theoretical aspects of RPNs. More  
    precisely, we show that this model is a strict  
    extension of the model of Petri nets in the following  
    sense: the family of languages of RPNs strictly  
    includes the union of Petri net and Context Free  
    languages. Then we prove the main result of this work,  
    the decidability of the reachability problem for RPNS.}"
```

15.12.2010

7. Prozessalgebra und Petrinetze

Alexander Eberling

```
@Article{Best01,  
  author = "E. Best and R. Devillers and M. Koutny",  
  title = "A unified model for nets and process algebra.",  
  journal = "Handbook of Process Algebra, edited by J.A. Bergstra,  
           A. Ponse and Sc.A. Smolka, Chapter 14, Elsevier Science  
           B.V.",  
  pages = "873--944",  
  year = "2001",  
  abstract = "This chapter of the handbook addresses a range of  
            issues that arise when process algebras and Petri nets  
            are combined; in particular, it focusses on  
            compositionality of structure and behaviour, on  
            refinement, and on equivalence notions. A generic  
            algebra of nets and process expressions is defined and  
            equipped with two types of semantics: a Petri net  
            semantics based on step sequences and causal partial  
            orders, and a structural operational semantics based on  
            a system of derivation rules. The main result states  
            that these two semantics are equivalent. A concrete  
            example of this algebraic framework is the Petri Box  
            Calculus (PBC) which is used to convey the basic ideas  
            contained in this chapter.",  
}
```

5.1.2011

8. Netze in Netzen

Julian Mosteller, David Mosteller

```
@Article{Valk04,  
  author = "Rüdiger Valk",  
  title = "Object Petri Nets: Using the Nets-within-Nets  
  Paradigm.",  
  journal = "Lectures on Concurrency and Petri Nets: Advances in  
  Petri Nets --- Volume 3098 of Lecture Notes in Computer  
  Science / Jörg Desel, Wolfgang Reisig, Grzegorz  
  Rozenberg (Eds.)",  
  pages = "819--848",  
  publisher = "Springer-Verlag",  
  month = jun,  
  year = "2004",  
  abstract = "The nets-within-nets paradigm provides an innovative  
  modelling technique by giving tokens themselves the  
  structure of a Petri net. These nets, called token nets  
  or object nets, also support the object oriented  
  modelling technique as they may represent real world  
  objects with a proper dynamical behaviour. Between  
  object nets and the surrounding net, called system net,  
  various interaction mechanisms exist as well as between  
  different object nets. This introduction into the field  
  of object Petri nets starts with small examples and  
  proceeds by giving formal semantics. Some of the  
  examples are modelled within the formalism of the Renew  
  tool. Finally the differences between reference and two  
  kinds of value semantics are discussed."}
```


12.1.2011

9. Datenkonsistenz

Florian Bücklers, Felix Gessert

(u.a. Arbeiten von Kindler)

19.1.2011

10. Prozessalgebra, Rekursion und Petrinetze

Christoph Koch, Matthias Harms

```
@Article{Best01,  
  author = "Eike Best and Raymond Devillers and Maciej Koutny",  
  title = "Recursion and Petri nets.",  
  journal = "Acta Informatica 37 (11-12)",  
  pages = "781--829",  
  year = "2001",  
  abstract = "This paper shows how to define Petri nets through  
recursive equations. It specifically addresses this  
problem within the context of the {it box algebra}, a  
model of concurrent computation which combines Petri  
nets and standard process algebras. The paper presents  
a detailed investigation of the solvability of  
recursive equations on nets in what is arguably the  
most general setting. For it allows an infinite number  
of possibly unguarded equations, each equation possibly  
involving infinitely many recursion variables. The main  
result is that by using a suitable partially ordered  
domain of nets, it is always possible to solve a system  
of equations by constructing the limit of a chain of  
successive approximations."}
```

26.1.2011

11. Kategrientheorie und Informatik

Niels Porsiel, Francis Amoah, Dimitri Popov

```
@book{BaNi98,  
  Author = {M. Barr and C. Wells},  
  Publisher = {Prentice-Hall},  
  Title = {Category Theory for Computing Science},  
  Year = {1995}}
```

siehe auch:

<http://www.cs.toronto.edu/~sme/presentations/cat101.pdf>

2.2.2011

12. Temporale Logik und Bisimulation

Nils Kubera, Julian Fietkau, Dominik Nuszpl

```
@book{Baier_Katoen,  
  Author = {C. Baier and J.-P. Katoen},  
  Date-Added = {2008-08-26 13:25:38 +0200},  
  Date-Modified = {2008-08-26 13:33:09 +0200},  
  Keywords = {Model Checking},  
  Publisher = {MIT press},  
  Title = {Principles of Model Checking},  
  Year = {2008}}
```

Chapter 7

auch am 2.2.2011 ???

13. Sicherheits- und Lebendigkeits-Eigenschaften als ω -Sprachen

Wolfram Wingerath, Steffen Friedrich

```
@book{Baier_Katoen,  
  Author = {C. Baier and J.-P. Katoen},  
  Date-Added = {2008-08-26 13:25:38 +0200},  
  Date-Modified = {2008-08-26 13:33:09 +0200},  
  Keywords = {Model Checking},  
  Publisher = {MIT press},  
  Title = {Principles of Model Checking},  
  Year = {2008}}
```

Chapter 3