List of Publications

Frits Vaandrager

May 19, 2026

Google Scholar lists more than 12.5K citations to my publications and my Hirsch index is 58 (January 2026). For some venues, I also listed the acceptance ratio or classification according to `http://www.core.edu.au/`.

Books

1. D.K. Kaynar, N.A. Lynch, R. Segala and F.W. Vaandrager. The Theory of Timed I/O Automata, Second Edition. Synthesis Lecture on Distributed Computing Theory, Morgan & Claypool Publishers, 137 pages. 2010. **(Scholar: 330)**

2. J. Ouaknine and F.W. Vaandrager (editors). Proceedings of the 7th International Conference on Formal Modeling and Analysis of Timed Systems (FORMATS 2009), Budapest, Hungary, September 14-16, 2009. Proceedings. LNCS 5813, Springer, X, 285 pages. 2009. ISBN 978-3-642-04367-3.

3. F.W. Vaandrager and J.H. van Schuppen, editors. Proceedings of the Second International Workshop on Hybrid Systems: Computation and Control (HSCC'99), Berg en Dal, The Netherlands, March 1999. LNCS 1569, Springer-Verlag, X, 271 pages. 1999.

4. G. Rozenberg and F.W. Vaandrager, editors. Lectures on Embedded Systems. LNCS 1494, Springer-Verlag, VIII, 423 pages. 1998.

5. Algebraic Techniques for Concurrency and Their Application. Ph.D. Thesis, University of Amsterdam, February 1990. CWI, Amsterdam, 244 pages. 1989.

Journal Papers

1. F.W. Vaandrager, M. Ebrahimi, and R. Bloem. Learning Mealy Machines with One Timer. In *Information and Computation*, 295, Part A, December 2023, 10513. Special Issue: Selected papers of the 15th International Conference on Language and Automata Theory and Applications, LATA 2021. `https://doi.org/10.1016/j.ic.2023.105013`. **(Scholar: 52)**

2. F.W. Vaandrager and A. Midya. A Myhill-Nerode Theorem for Register Automata and Symbolic Trace Languages. In *Theoretical Computer Science* 912:37–55, 2022. Special issue *ICTAC'20*. `https://doi.org/10.1016/j.tcs.2022.01.015` **(CORE: A)**

3. P. van den Bos and F.W. Vaandrager. State identification for labeled transition systems with inputs and outputs. In *Science of Computer Programming*, Volume 209, 2021, 102678, ISSN 0167-6423, `https://doi.org/10.1016/j.scico.2021.102678`. **(CORE: A)**

4. M.G.T.A. Rutten, F.W. Vaandrager, J.A.A.W. Elemans, and R.J.M. Nolte. Encoding information into polymers. *Nature Reviews Chemistry* 2:365-381, 2018. DOI: 10.1038/s41570-018-0051-5. **(Scholar: 235)**

5. F.W. Vaandrager. Model Learning. *Communications of the ACM (CACM)* 60(2): 86-95. February 2017. Cover article. Reached top 3 of most downloaded CACM papers in February 2017 with 5K downloads in 6 weeks. 20,558 downloads (May 19, 2026). Translated in Chinese and Spanish. **(Scholar: 347)**

6. F. Aarts, B. Jonsson, J. Uijen, and F.W. Vaandrager. Generating Models of Infinite-State Communication Protocols using Regular Inference with Abstraction. *Formal Methods in System Design* 46(1):1-41, 2015. **(CORE: A) (Scholar: 185)**

7. F. Verbeek and F.W. Vaandrager. Recreational Formal Methods: Designing Vacuum Cleaning Trajectories. *Bulletin of the EATCS* 113:100-109, June 2014.

8. F. Aarts, H. Kuppens, G.J. Tretmans, F.W. Vaandrager, and S. Verwer. Improving Active Mealy Machine Learning for Protocol Conformance Testing. *Machine Learning* 96(1-2): 189–224, 2014. **(CORE: A*) (Scholar: 82)**

9. F. Houben, G. Igna, and F.W. Vaandrager. Modeling Task Systems Using Parameterized Partial Orders. In *International Journal on Software Tools for Technology Transfer (STTT)*, 15(3):269-286, 2013. DOI: 10.1007/s10009-012-0264-8.

10. F. Heidarian, J. Schmaltz, and F.W. Vaandrager. Analysis of a Clock Synchronization Protocol for Wireless Sensor Networks. In *Theoretical Computer Science* 413: 87-105, 2012. Special issue on QAPL'10. DOI: 10.1016/j.tcs.2011.07.018. **(CORE: A) (Scholar: 81)**

11. J. Berendsen, B. Gebremichael, F.W. Vaandrager, and Miaomiao Zhang. Formal Specification and Analysis of Zeroconf using Uppaal. In *ACM Transactions on Embedded Computing Systems* 10(3), 2011. **(CORE: A) (Scholar: 57) (Using Uppaal we found 6 errors/ambiguities in the RFC for an internet protocol; our paper triggered further research on e.g. compositional verification and probabilistic model checking.)**

12. J. Berendsen, D. Jansen J. Schmaltz, and F.W. Vaandrager. The Axiomatization of Override and Update. In *Journal of Applied Logic* 8:141-150, 2010. ISSN 1570-8683, DOI: 10.1016/j.jal.2009.11.001. **(CORE: A)**

13. R. Hamberg and F.W. Vaandrager. Using Model Checkers in an Introductory Course on Operating Systems. *ACM SIGOPS Operating Systems Review* 42(6):101-111, October 2008.

14. L. Cheung, M.I.A. Stoelinga, and F.W. Vaandrager. A Testing Scenario for Probabilistic Processes. In: *Journal of the ACM* 54(6), December 2007. **(CORE: A*) (Scholar: 63) (For this paper, Mariëlle Stoelinga was awarded the 2008 Professor De Winter prize for the best journal publication by a female scientist at the University of Twente.)**

15. N.A. Lynch, R. Segala, and F.W. Vaandrager. Observing Branching Structure Through Probabilistic Contexts. In: *SIAM Journal on Computing* 37(4):977-1013, 2007. **(CORE: A*) (Scholar: 71)**

16. F.W. Vaandrager and A.L. de Groot. Analysis of a Biphase Mark Protocol with Uppaal and PVS. In *Formal Aspects of Computing Journal* 18(4):433-458, December 2006. **(CORE: A) (Scholar: 62)**

17. L. Cheung, N.A. Lynch, R. Segala, and F.W. Vaandrager. Switched PIOA: Parallel Composition via Distributed Scheduling. In *Theoretical Computer Science* 365(1-2):83-108, 2006. **(CORE: A) (Scholar: 75)**

18. M. Hendriks, N.J.M. van den Nieuwelaar, and F.W. Vaandrager. Model Checker Aided Design of a Controller for a Wafer Scanner. In *International Journal on Software Tools for Technology Transfer (STTT)* 8(6):633–647, Special Section on Quantitative Analysis of Real-time Embedded Systems, 2006.

19. W.O.D. Griffioen and F.W. Vaandrager. A Theory of Normed Simulations. In *ACM Transactions on Computational Logic (TOCL)* 5(4):577–610, October 2004. **(CORE: A) (CompCert, a high-assurance verified compiler for almost all of the C language, heavily relies on this work, and normed simulations shaped most later notions of simulation for verified compilation.)**

20. N.A. Lynch, R. Segala, and F.W. Vaandrager. Hybrid I/O automata. *Information and Computation* 185(1):105–157, August 2003. **(Scholar: 604)**

21. T.S. Hune, J.M.T. Romijn, M.I.A. Stoelinga, and F.W. Vaandrager. Linear parametric model checking of timed automata. *The Journal of Logic and Algebraic Programming* 52-53:183–220, 2002. **(Scholar: 215)**

22. J.G. Springintveld, F.W. Vaandrager, and P.R. D'Argenio. Testing Timed Automata. *Theoretical Computer Science* 254(1–2):225-257, March 2001. **(CORE: A) (Scholar: 394)**

23. M.C.A. Devillers, W.O.D. Griffioen, J.M.T. Romijn, and F.W. Vaandrager. Verification of a Leader Election Protocol: Formal Methods Applied to IEEE 1394. *Formal Methods in System Design*, 16(3):307-320, June 2000. **(CORE: A) (Scholar: 105)**

24. R.J. van Glabbeek and F.W. Vaandrager. The difference between splitting in n and $n + 1$. *Information and Computation*, 136(2):109–142, August 1997. **(Scholar: 68)**

25. J.M.T. Romijn and F.W. Vaandrager. A note on fairness in I/O automata. *Information Processing Letters*, 59(5):245–250, 1996.

26. N.A. Lynch and F.W. Vaandrager. Action transducers and timed automata. *Formal Aspects of Computing*, 8(5):499–538, Sept-Oct 1996. **(Scholar: 105)**

27. N.A. Lynch and F.W. Vaandrager. Forward and backward simulations, II: Timing-based systems. *Information and Computation*, 128(1):1–25, July 1996. **(Scholar: 205)**

28. N.A. Lynch and F.W. Vaandrager. Forward and backward simulations, I: Untimed systems. *Information and Computation*, 121(2):214–233, September 1995. **(Scholar: 720)**

29. R. De Nicola and F.W. Vaandrager. Three logics for branching bisimulation. *Journal of the ACM*, 42(2):458–487, March 1995. **(Scholar: 535)**

30. L. Aceto, B. Bloom, and F.W. Vaandrager. Turning SOS rules into equations. *LICS'92 Special Issue of Information and Computation*, 111(1):1–52, May 1994. **(Scholar: 211)**

31. R.J. van Glabbeek and F.W. Vaandrager. Modular specification of process algebras. *Theoretical Computer Science*, 113(2):293–348, 1993. **(CORE: A) (Scholar: 65)**

32. J.F. Groote and F.W. Vaandrager. Structured operational semantics and bisimulation as a congruence. *Information and Computation*, 100(2):202–260, October 1992. **(Scholar: 472)**

33. J.C.M. Baeten and F.W. Vaandrager. An algebra for process creation. *Acta Informatica*, 29(4):303–334, 1992.

34. F.W. Vaandrager. Determinism $\rightarrow$ (event structure isomorphism = step sequence equivalence). *Theoretical Computer Science*, 79:275–294, 1991. **(CORE: A)**

Conference Papers and Refereed Articles in Books

1. Jasper Laumen, Leonne Snel, and Frits Vaandrager. An $L^{\#}$ Based Algorithm for Active Learning of Minimal Separating Automata. To appear in *Proceedings of the 38th International Conference on Computer Aided Verification (CAV 2026)*. Full version available as CoRR arXiv:2605.15294, May 2026. **(CORE: A*)**

2. V. Bruyère, B. Garhewal, G.A. Pérez, Gaëtan Staquet, and F.W. Vaandrager. Active Learning of Mealy Machines with Timers. In *Proceedings QEST+FORMATS'25*, 2025.

3. F.W. Vaandrager and I. Melse. New Fault Domains for Conformance Testing of Finite State Machines. In *Proceedings CONCUR'25*, 2025. Full version available as CoRR arXiv:2410.19405v2, June 2025.

4. Hanyue Chen, Miaomiao Zhang, and F.W. Vaandrager. Compositional Abstraction for Timed Systems with Broadcast Synchronization. In *Proceedings CAV'25*, 2025. Full version available as CoRR arXiv:2505.12436, May 2025. **(CORE: A*)**

5. F.W. Vaandrager and M. Sanders. $L^{\#}$ for DFAs. In: Jansen, N., et al., editors. *Principles of Verification: Cycling the Probabilistic Landscape.* Lecture Notes in Computer Science 15262, pages 155–172. Springer, Cham., 2025.

6. F. Vaandrager. A New Perspective on Conformance Testing Based on Apartness. Venanzio Capretta, Robbert Krebbers, Freek Wiedijk, editors. *Logics and Type Systems in Theory and Practice - Essays Dedicated to Herman Geuvers on The Occasion of His 60th Birthday.* Lecture Notes in Computer Science 14560, pages 225–240. Springer 2024.

7. V. Bruyère, G.A. Pérez, G. Staquet and F.W. Vaandrager. Automata with Timers. In L. Petrucci and J. Sproston, editors. *Proceedings Formal Modeling and Analysis of Timed Systems - 21st International Conference, FORMATS 2023*, Antwerp, Belgium, September 19-21, 2023. Lecture Notes in Computer Science 14138, pages 33–49, Springer 2023, ISBN 978-3-031-42625-4. **This paper received the Oded Maler Award in Timed Systems for best paper.**
Full version available as CoRR arxiv:2305.07451, May 2023.

8. L. Kruger, B. Garhewal and F.W. Vaandrager. Lower Bounds for Active Automata Learning. In *Proceedings 16h International Conference on Grammatical Inference (ICGI 2023)*, July 10-13, 2023, Rabat, Morocco.

9. F.W. Vaandrager and T. Wißmann. Action Codes. In K. Etessami, U. Feige, and G. Puppis, editors, *50th International Colloquium on Automata, Languages, and Programming (ICALP 2023)*, volume 261 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 137:1–137:20, Dagstuhl, Germany, 2023. Schloss Dagstuhl – Leibniz-Zentrum für Informatik. **(Acceptance rate 30%) (CORE: A*)**
Full version available as CoRR arxiv:2301.00199, January 2023.

10. F.W. Vaandrager, B. Garhewal, J. Rot, and T. Wißmann. A New Approach for Active Automata Learning Based on Apartness. In: Fisman, D., Rosu, G. (eds) *Tools and Algorithms for the Construction and Analysis of Systems (TACAS 2022).* Lecture Notes in Computer Science, vol 13243. Springer, Cham., 2022. **(Acceptance rate research papers 29%) (Scholar: 110) (CORE: A)**

11. F.W. Vaandrager, M. Ebrahimi, and R. Bloem. Learning Mealy Machines with One Timer. In *Proceedings 14th-15th International Conference on Language and Automata Theory and Applications (LATA 2020/2021)*, Milan, Italy, March 1-5, 2021.
Full version appeared in *Information and Computation.*

12. F.W. Vaandrager and A. Midya. A Myhill-Nerode Theorem for Register Automata and Symbolic Trace Languages. In *Proceedings ICTAC'20.*
Full version appeared in *Theoretical Computer Science.*

13. B. Garhewal, F.W. Vaandrager, F. Howar, T. Schrijvers, T. Lenaerts, and R. Smit. Grey-Box Learning of Register Automata. In *Proceedings iFM'20.*
Full version available as CoRR arXiv:2009.09975, September 2020.

14. P. van den Bos and F.W. Vaandrager. State identification for labeled transition systems with inputs and outputs. In Farhad Arbab and Sung-Shik Jongmans, editors, *Formal Aspects of Component Software - 16th International Conference, FACS 2019, Amsterdam, The Netherlands, October 23-25, 2019, Proceedings*, volume 12018 of *Lecture Notes in Computer Science*, pages 191–212. Springer, 2019. **(Best paper award)**
Full version appeared in *Science of Computer Programming*.

15. R. Janssen, F.W. Vaandrager, and G.J. Tretmans. Relating Alternating Relations for Conformance and Refinement. In Wolfgang Ahrendt, Silvia Lizeth Tapia Tarifa. Proceedings Integrated Formal Methods - 15th International Conference, IFM 2019, Bergen, Norway, December 2-6, 2019, Lecture Notes in Computer Science 11918, pages 246–264, Springer 2019. **(Acceptance rate 29%)**
Full version available as CoRR arXiv:1909.13604, September 2019.

16. B. Jonsson, F. Howar, and F.W. Vaandrager. Combining Black-Box and White-Box Techniques for Learning Register Automata. In B. Steffen and G. Woeginger, editors. Computing and Software Science, LNCS 10000, pages 563-588, Springer, Cham, 2019.

17. F.W. Vaandrager. Automata learning and Galois connections (invited talk). In C. Baier, I. Chatzigiannakis, P. Flocchini, and S. Leonardi, editors, 46th International Colloquium on Automata, Languages, and Programming, ICALP 2019, July 9-12, 2019, Patras, Greece., volume 132 of LIPIcs, pages 4:1-4:1. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2019.

18. D. Neider, R. Smetsers, F.W. Vaandrager, and H. Kuppens. Benchmarks for Automata Learning and Conformance Testing. In T. Margaria, K.G. Larsen and S. Graf, editors. Models, Mindsets, Meta: The What, the How, and the Why Not? LNCS 11200, Springer Nature Switzerland, 2019.

19. M. Jasper, M. Mues, A. Murtovi, M. Schlüter, F. Howar, B. Steffen, M. Schordan, D. Hendriks, R.R.H. Schiffelers, H. Kuppens, F.W. Vaandrager. RERS 2019: Combining Synthesis with Real-World Models. In D. Beyer, M. Huisman, F. Kordon, and B. Steffen, editors. International Conference on Tools and Algorithms for the Construction and Analysis of Systems - 25 Years of TACAS: TOOLympics, Held as Part of ETAPS 2019, Prague, Czech Republic, April 6-11, 2019, Proceedings, Part III. LNCS 11429, pp 101-115, Springer 2019.

20. A. Linard, C. de la Higuera, and F.W. Vaandrager. Learning Unions of k-Testable Languages. In Carlos Martín-Vide, Alexander Okhotin, Dana Shapira, editors. Language and Automata Theory and Applications - 13th International Conference, LATA 2019, St. Petersburg, Russia, March 26-29, 2019, Proceedings. Lecture Notes in Computer Science 11417, Springer 2019, ISBN 978-3-030-13434-1 Full version available as CoRR arXiv:1812.08269, December 2018. **(Acceptance rate 32%)**

21. R. Smetsers, P. Fiterau-Brostean, and F.W. Vaandrager. Model Learning as a Satisfiability Modulo Theories Problem. In S.T. Klein et al, editors. Proceedings 12th International Conference on Language and Automata Theory and Applications (LATA 2018), Bar-Ilan, Israel, April 9-11, 2018. LNCS 10792, pp. 182-194, 2018.

22. P. Fiterău-Broştean, T. Lenaerts, E. Poll, J. de Ruiter, F.W. Vaandrager, and P. Verleg. Model Learning and Model Checking of SSH Implementations. In H. Erdogmus and K. Havelund, editors. *Proceedings 24th ACM SIGSOFT International SPIN Symposium on Model Checking of Software*, 13-14 July 2017, Santa Barbara, CA, USA, pages 142-151. ACM. Dataset for this paper deposited at `https://doi.org/10.17026/dans-z6n-dxq6`. **(Scholar: 153)**

23. P. Fiterău-Broştean, R. Janssen, and F.W. Vaandrager. Combining Model Learning and Model Checking to Analyze TCP Implementations. In S. Chaudhuri and A. Farzan, editors. *Proceedings 28th International Conference on Computer Aided Verification (CAV'16)*,

Toronto, Ontario, Canada, July 17-23, 2016. LNCS 9780, pp. 454-471, Springer, 2016. **(CORE: A*) (Acceptance rate 28%) (Scholar: 216)**

24. M. Schuts. J. Hooman and F.W. Vaandrager. Refactoring of Legacy Software using Model Learning and Equivalence Checking: an Industrial Experience Report. In E. Abraham and M. Huisman, editors. *Proceedings 12th International Conference on integrated Formal Methods (iFM)*, Reykjavik, Iceland, June 1-3, 2016. LNCS 9681, pp. 311-325, Springer, 2016. **(Acceptance rate 30%) (Scholar: 81)**

25. P. van den Bos, R. Smetsers, and F.W. Vaandrager. Enhancing Automata Learning by Log-Based Metrics. In E. Abraham and M. Huisman, editors. *Proceedings 12th International Conference on integrated Formal Methods (iFM)*, Reykjavik, Iceland, June 1-3, 2016. LNCS 9681, pp. 295-310, Springer, 2016. **(Acceptance rate 30%)**

26. W. Smeenk, J. Moerman, F.W. Vaandrager, and D.N. Jansen. Applying Automata Learning to Embedded Control Software. In M. Butler, S. Conchon and F. Zaidi, editors. *Proceedings 17th International Conference on Formal Engineering Methods (ICFEM 2015)*, Paris, 3-6 November 2015. LNCS, Springer, 2015. **(Acceptance rate 32%) (Scholar: 103)**

27. F. Aarts, P. Fiterău-Broştean, H. Kuppens, and F.W. Vaandrager. Learning Register Automata with Fresh Value Generation. In M. Leucker, C. Rueda and F.D. Valencia, editors. *Proceedings 12th International Colloquium on Theoretical Aspects of Computing (ICTAC 2015)*, Cali, Colombia, October 29-31. LNCS 9399, pp. 165-183, Springer Verlag, 2015. **(Acceptance rate 35%) (Scholar: 74)**

28. F. Aarts, H. Kuppens, F. Howar, and F.W. Vaandrager. Algorithms for Inferring Register Automata - A Comparison of Existing Approaches. In T. Margaria and B. Steffen, editors. *Proceedings 6th International Symposium On Leveraging Applications of Formal Methods, Verification and Validation (ISOLA 2014)*, 8-11 October 2014, Imperial, Corfu, Greece. LNCS 8802, pp. 202-2019, Springer Verlag, 2014.

29. R. Smetsers, M. Volpato, F.W. Vaandrager, and S. Verwer. Bigger is Not Always Better: On the Quality of Hypothesis in Active Automata Learning. In A. Clark, M. Kanazawa, and R. Yoshinaka. *Proceedings 12th International Conference on Grammatical Inference (ICGI 2014)*, Kyoto, Japan, September 17-19, 2014, JMLR 34: 167–181.

30. P. Fiterău-Broştean, R. Janssen, and F.W. Vaandrager. Learning Fragments of the TCP Network Protocol. In F. Lang and F. Flammini, editors. *Proceedings 19th International Workshop on Formal Methods for Industrial Critical Systems (FMICS'14)*, Florence, Italy, September 11-12, 2014. LNCS 8718, pp. 78–93, Springer-Verlag, 2014.

31. A. Jalil Boudjadar, F.W. Vaandrager, J.-P. Bodeveix, and M. Filali. Extending UPPAAL for the Modeling and Verification of Dynamic Real-Time Systems. In F. Arbab and M. Sirjani, editors. *Proceedings Fundamentals of Software Engineering (FSEN'13)*, 24-26 April 2013, Tehran, Iran. LNCS 8161, pp. 111–132, Springer-Verlag, 2013.

32. M. Hendriks and F.W. Vaandrager. Reconstructing Critical Paths from Execution Traces. In *Proceedings 10th IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC'12*, 5-7 December 2012, Paphos, Cyprus. IEEE Computer Society, pages 524-531, 2012. DOI 10.1109/ICCSE.2012.78.

33. A. Boudjadar, F.W. Vaandrager, J.-P. Bodeveix, and M. Filali. Callable Timed Automata: Adding Process Creation and Process Calls to UPPAAL. In *Proceedings 12th International Workshop on Automated Verification of Critical Systems (AVoCS)*, 18-20th September 2012, Bamberg, Germany.

34. F.W. Vaandrager. Active learning of extended finite state machines. In B. Nielsen and C. Weise, editors, *Proceedings 24th IFIP WG 6.1 International Conference on Testing Software and Systems (ICTSS 2012)*, Aalborg, Denmark, November 19-21, 2012, LNCS 7641, pages 5-7. Springer Berlin Heidelberg, 2012.

35. F. Aarts, H. Kuppens, G.J. Tretmans, F.W. Vaandrager, and S. Verwer. Learning and Testing the Bounded Retransmission Protocol. In J. Heinz, C. de la Higuera, and T. Oates, editors. *Proceedings 11th International Conference on Grammatical Inference (ICGI 2012)*, September 5 - 8, 2012, University of Maryland, College Park, USA. JMLR Workshop and Conference Proceedings 21:4-18, 2012.
Full version appeared in *Machine Learning*.

36. F. Aarts, F. Heidarian, and F.W. Vaandrager. A Theory of Abstractions for Learning I/O Automata. In M. Koutny and I. Ulidowski, editors. *Proceedings 23rd International Conference on Concurrency Theory (CONCUR)*, Newcastle upon Tyne, UK, September 3-8, 2012. LNCS 7454, pp. 240-255, Springer-Verlag, 2012. **(CORE: A) (Acceptance rate 36%)**

37. F. Aarts, F. Heidarian, H. Kuppens, P. Olsen, and F.W. Vaandrager. Automata Learning Through Counterexample-Guided Abstraction Refinement. In D. Giannakopoulou and D. Méry, editors. *Proceedings 18th International Symposium on Formal Methods (FM 2012)*, Paris, France, August 27-31, 2012. Springer-Verlag 2012. LNCS 7436, pp. 10-27, Springer-Verlag, 2012. **(CORE: A) (Acceptance rate 26%) (Scholar: 114)**

38. F. Houben, G. Igna, and F.W. Vaandrager. Modeling Task Systems Using Parameterized Partial Orders. In M. Di Natale, editor. *Proceedings 18th IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS 2012)*, Beijing China, April 16-19, 2012. IEEE Computer Society, pp 317-327, 2012. **(CORE: A) (Acceptance rate 24%)**

39. F. Aarts, J. Schmaltz, and F.W. Vaandrager. Inference and Abstraction of the Biometric Passport. In T. Margaria and B. Steffen, editors. *Proceedings 4th International Symposium On Leveraging Applications of Formal Methods, Verification and Validation (ISoLA 2010)*, 18-20 October 2010 - Amirandes, Heraclion, Crete. LNCS 6415, pp. 673-686, Springer-Verlag, 2010. **(Scholar: 119)**

40. T. Basten, E. van Benthum, M. Geilen, M. Hendriks, F. Houben, G. Igna, F. Reckers, S. de Smet, L. Somers, E. Teeselink, N. Trcka, F. Vaandrager, J. Verriet, M. Voorhoeve, and Y. Yang. Model-Driven Design-Space Exploration for Embedded Systems: The Octopus Toolset. In T. Margaria and B. Steffen, editors. *Proceedings 4th International Symposium On Leveraging Applications of Formal Methods, Verification and Validation (ISoLA 2010)*, 18-20 October 2010 - Amirandes, Heraclion, Crete. LNCS 6415, pp. 90-105, Springer-Verlag, 2010. **(Scholar: 81)**

41. G. Igna and F.W. Vaandrager. Verification of Printer Datapaths using Timed Automata. In T. Margaria and B. Steffen, editors. *Proceedings 4th International Symposium On Leveraging Applications of Formal Methods, Verification and Validation (ISoLA 2010)*, 18-20 October 2010 - Amirandes, Heraclion, Crete. LNCS 6416, pp. 412-423, Springer-Verlag, 2010.

42. J. Berendsen, D.N. Jansen, and F.W. Vaandrager. Fortuna: Model Checking Priced Probabilistic Timed Automata. In *Proceedings QEST'2010*, Williamsburg, Virginia, USA, September 15 - 18, 2010. **(Acceptance rate 48%)**

43. F. Aarts and F.W. Vaandrager. Learning I/O Automata. In P. Gastin and F. Laroussinie, editors. *Proceedings CONCUR'10*, Paris, France, August 31st - September 3rd, 2010. LNCS 6269, pp. 71-85, Springer-Verlag, 2010. **(CORE: A) (Acceptance rate 33%) (Scholar: 158)**

44. M. Schuts, F. Zhu, F. Heidarian, and F.W. Vaandrager. Modelling Clock Synchronization in the Chess gMAC WSN Protocol. In S. Andova et.al., editors. *Proceedings First Workshop on Quantitative Formal Methods: Theory and Applications (QFM'09)*. Eindhoven, The Netherlands, 3rd November 2009. Electronic Proceedings in Theoretical Computer Science 13, pp. 41-54, 2009.

45. I. AlAttili, F. Houben, G. Igna, S. Michels, F. Zhu, and F.W. Vaandrager. Adaptive Scheduling of Data Paths using Uppaal Tiga. In S. Andova et.al., editors. *Proceedings First Workshop on Quantitative Formal Methods: Theory and Applications (QFM'09)*. Eindhoven, The Netherlands, 3rd November 2009. Electronic Proceedings in Theoretical Computer Science 13, pp. 1-12, 2009.

46. F. Heidarian, J. Schmaltz, and F.W. Vaandrager. Analysis of a Clock Synchronization Protocol for Wireless Sensor Networks. In A. Cavalcanti and D. Dams, editors. *Proceedings 16th International Symposium of Formal Methods (FM2009)*, Eindhoven, the Netherlands, November 2-6, 2009. LNCS 5850, pp. 516–531, Springer-Verlag. **(Acceptance rate 26%) (CORE: A)**
Full version appeared in *Theoretical Computer Science*.

47. F.W. Vaandrager, D.N. Jansen, and E. Koopmans. Een Module over Model Checking voor het VWO. In F. Vodegel en M. Loots, editors. *Proceedings NIOC 2009*, Utrecht, 7-8 April 2009, pp. 135–137. Drukkerij Damen, Werkendam.

48. J. Berendsen and F.W. Vaandrager. Compositional Abstraction in Real-Time Model Checking. In F. Cassez and C. Jard, editors. *Proceedings Sixth International Conference on Formal Modeling and Analysis of Timed Systems (FORMATS 2008)*, September 15-17, 2008, Saint-Malo, France. 2008. LNCS 5215, pp. 233-249, Springer-Verlag.

49. G. Igna, V. Kannan, Y. Yang, T. Basten, M. Geilen, F.W. Vaandrager, M. Voorhoeve, S. De Smet, and L. Somers. Formal Modeling and Scheduling of Data Paths of Digital Document Printers. In F. Cassez and C. Jard, editors. *Proceedings Sixth International Conference on Formal Modeling and Analysis of Timed Systems (FORMATS 2008)*, September 15-17, 2008, Saint-Malo, France. 2008. LNCS 5215, pp. 169-186, Springer-Verlag.

50. B. Gebremichael, F.W. Vaandrager, and M. Zhang. Analysis of a Protocol for Dynamic Configuration of IPv4 Link Local Addresses using Uppaal. In *Proceedings of the 6th Annual ACM & IEEE Conference on Embedded Software (EMSOFT 2006)*, Seoul, South Korea, October 22-25, 2006. ACM Press, pages 242-251. **(CORE: A) (Acceptance rate 33%)**
Full version appeared in *ACM TECS*.

51. B. Gebremichael, F.W. Vaandrager, M. Zhang, K. Goossens, E. Rijpkema, and A. Rădulescu. Deadlock Prevention in the Aethereal Protocol. In D. Borrione and W. Paul, editors. *Proceedings 13th IFIP Advanced Research Working Conference on Correct Hardware Design and Verification Methods (CHARME'05)*, Saarbrucken, Germany, October 3-6, 2005. LNCS 3725, pages 345–348. Springer-Verlag, 2005. **(Top 29.97% Citeseer) (Scholar: 63)**

52. B. Gebremichael and F.W. Vaandrager. Specifying Urgency in Timed I/O Automata. In B.K. Aichernig and B. Beckert, editors. *Proceedings of the 3rd IEEE International Conference on Software Engineering and Formal Methods (SEFM 2005)*, Koblenz, Germany, September 5-9, 2005. IEEE Computer Society, pages 64-73. **(Acceptance rate 33%)**

53. M. Hendriks, N.J.M. van den Nieuwelaar, and F.W. Vaandrager. Model Checker Aided Design of a Controller for a Wafer Scanner. In T. Margaria, B. Steffen, A. Philippou, and M. Reitenspiess, editors. *Preliminary Proceedings 1st International Symposium on Leveraging Applications of Formal Methods (ISOLA'04)*, Paphos, Cyprus, 30 October - 2 November 2004. Technical Report TR-2004-6, Department of Computer Science, University of Cyprus, pages 201-209. **(Referred to in patent application ASML ref. P-1784.010.)**

54. L. Cheung, N.A. Lynch, R. Segala, and F.W. Vaandrager. Switched Probabilistic I/O automata. In Z. Liu and K. Araki, editors. *Proceedings First International Colloquium on Theoretical Aspects of Computing (ICTAC2004)*, Guiyang, China 20-24 September 2004. LNCS 3407, pages 494-510. Springer Verlag, 2005. **(Acceptance rate 31%)**
Full version appeared in *Theoretical Computer Science*.

55. B. Gebremichael and F.W. Vaandrager. Control Synthesis for a Smart Card Personalization System Using Symbolic Model Checking. In K.G. Larsen and P. Niebert, editors. *Proceedings First International Workshop on Formal Modeling and Analysis of Timed Systems (FORMATS 2003)*, September 6-7 2003, Marseille, France. LNCS 2791, pages 189–203. Springer-Verlag, 2004.

56. M. Hendriks, G. Behrmann, K.G. Larsen, P. Niebert, and Frits Vaandrager. Adding Symmetry Reduction to Uppaal. In K.G. Larsen and P. Niebert, editors. *Proceedings First International Workshop on Formal Modeling and Analysis of Timed Systems (FORMATS 2003)*, September 6-7 2003, Marseille, France. LNCS 2791, pages 46–59. Springer-Verlag, 2004. **(Scholar: 134)**

57. D.K. Kaynar, N.A. Lynch, R. Segala, and F.W. Vaandrager. A Framework for Modelling Timed Systems with Restricted Hybrid Automata. In *Proceedings 24th IEEE International Real-Time Systems Symposium (RTSS03)*, December 3-5, 2003, Cancun, Mexico. IEEE Computer Society, pages 166–177. **(CORE: A*) (Acceptance rate 26%) (Scholar: 173)**

58. R.J. van Glabbeek and F.W. Vaandrager. Bundle Event Structures and CCSP. In R. Amadio and D. Lugiez, editors, *Proceedings 14th International Conference on Concurrency Theory (CONCUR 2003)*, Marseille, France, September 3-5, 2003. LNCS 2761, pages 57-71. Springer-Verlag, 2003. **(CORE: A) (Acceptance rate 27%)**

59. N.A. Lynch, R. Segala, and F.W. Vaandrager. Compositionality for Probabilistic Automata. In R. Amadio and D. Lugiez, editors, *Proceedings 14th International Conference on Concurrency Theory (CONCUR 2003)*, Marseille, France, September 3-5, 2003. LNCS 2761, pages 208-221. Springer-Verlag, 2003. **(CORE: A) (Acceptance rate 27%) (Scholar: 75)**

60. M. Hendriks, N.J.M. van den Nieuwelaar, and F.W. Vaandrager. Recognizing Finite Repetitive Scheduling Patterns in Manufacturing Systems. In G. Kendall, E. Burke, and S. Petrovic, editors. *Proceedings of the 1st Multidisciplinary International Conference on Scheduling: Theory and Applications (MISTA 2003)*, Nottingham, UK, August 13-16, 2003, Volume I, pages 291–319. The University of Nottingham, UK, 2003. ISBN 0-9545821-0-1.

61. H. Bohnenkamp, P. van der Stok, H. Hermanns, and F. Vaandrager. Cost-Optimisation of the IPv4 Zeroconf Protocol. In *Proceedings of the 2003 International Conferences on Dependable Systems and Networks*, June 22-25, San Fransisco CA, IEEE CS Press, pages 531-540, June 2003. **(CORE: A) (Acceptance rate 35%) (Scholar: 78)**

62. M.I.A. Stoelinga and F.W. Vaandrager. A Testing Scenario for Probabilistic Automata. In J.C.M. Baeten, J.K. Lenstra, J. Parrow, and G.J. Woeginger, editors, *Proceedings ICALP 2003*, LNCS 2719, pages 407-418. Springer-Verlag, 2003. **(CORE: A) (Acceptance rate 40%) (Received the EATCS prize for best track B paper of ICALP 2003.)**
Full version appeared in *Journal of the ACM*.

63. A. Fehnker, M. Zhang, and F.W. Vaandrager. Modeling and Verifying a Lego Car Using Hybrid I/O Automata. In *Third International Conference on Quality Software (QSIC 2003)*, Dallas, Texas, USA, November 6 - 7, IEEE Computer Society Press, 2003. **(Acceptance rate 30%)**

64. N.A. Lynch, R. Segala, and F.W. Vaandrager. Hybrid I/O automata revisited. In M.D. Di Benedetto and A.L. Sangiovanni-Vincentelli, editors. *Proceedings HSCC'01*, Rome, Italy, March 2001. LNCS 2034, pages 403–417. Springer-Verlag, 2001. **(Scholar: 143)**

65. G. Behrmann, A. Fehnker, T.S. Hune, K.G. Larsen, P. Pettersson, J.M.T. Romijn, and F.W. Vaandrager. Minimum-cost reachability for priced timed automata. In M.D. Di Benedetto and A.L. Sangiovanni-Vincentelli, editors. *Proceedings HSCC'01*, Rome, Italy, March 2001. LNCS 2034, pages 147–161. Springer-Verlag, 2001. **(Scholar: 466)**

66. T.S. Hune, J.M.T. Romijn, M.I.A. Stoelinga, and F.W. Vaandrager. Linear parametric model checking of timed automata. In T. Margaria and W. Yi, editors. *Proceedings TACAS'01*, Genova, Italy, April 2001. LNCS 2031, pages 189–203. Springer-Verlag, 2001. **(Scholar: 99) (CORE: A) (Acceptance rate 29%)**
Full version appeared in *The Journal of Logic and Algebraic Programming.*

67. G. Behrmann, T.S. Hune, and F.W. Vaandrager. Distributed Timed Model Checking - How the Search Order Matters. In E.A. Emerson and A.P. Sistla, editors. *Proceedings CAV'00*, Chicago, July 2000. LNCS 1855, pages 216–231. Springer-Verlag, 2000. **(CORE: A*) (Scholar: 145)**

68. M.I.A. Stoelinga and F.W. Vaandrager. Root Contention in IEEE 1394. In J.-P. Katoen, editor, *Proceedings 5th Int. AMAST Workshop on Real-Time and Probabilistic Systems (ARTS'99)*, Bamberg, Germany. LNCS 1601, pages 53–74. Springer-Verlag, 1999. **(Scholar: 105)**

69. H. Dierks, A. Fehnker, A. Mader, and F.W. Vaandrager. Operational and logical semantics for polling real-time systems. In A.P. Ravn and H. Rischel, editors, *Proceedings FTRTFT'98*, Lyngby, Denmark, LNCS 1486, pages 29–40. Springer-Verlag, 1998.

70. W.O.D. Griffioen and F.W. Vaandrager. Normed simulations. In A.J. Hu and M.Y. Vardi, editors, *Proceedings CAV'98*, Vancouver, BC, Canada, LNCS 1427, pages 332-344. Springer-Verlag, 1998. **(CORE: A*) (Acceptance rate 29%)**
Full version appeared in *ACM Transactions on Computational Logic.*

71. J.G. Springintveld and F.W. Vaandrager. Minimizable timed automata. In B. Jonsson and J. Parrow, editors, *Proceedings FTRTFT'96*, Uppsala, Sweden, LNCS 1135, pages 130–147. Springer-Verlag, 1996.

72. N.A. Lynch, R. Segala, F.W. Vaandrager, and H.B. Weinberg. Hybrid I/O automata. In R. Alur, T.A. Henzinger, and E.D. Sontag, editors, *Hybrid Systems III*, LNCS 1066, pages 496–510. Springer-Verlag, 1996. **(Scholar: 359)**

73. F.W. Vaandrager. Verification of a distributed summation algorithm. In I. Lee and S.A. Smolka, editors, *Proceedings* 6^{th} *International Conference on Concurrency Theory (CONCUR'95)*, Philadelphia, PA, USA, August 1995, LNCS 962, pages 190–203. Springer-Verlag, 1995. **(CORE: A)**

74. D.J.B. Bosscher, I. Polak, and F.W. Vaandrager. Verification of an audio control protocol. In H. Langmaack, W.P. de Roever, and J. Vytopil, editors, *Proceedings* 3^{rd} *International School and Symposium on Formal Techniques in Real Time and Fault Tolerant Systems (FTRTFT'94)*, Lübeck, Germany, September 1994, LNCS 863, pages 170–192. Springer-Verlag, 1994. **(Received the best paper award of FTRTFT'94.) (Scholar: 149 citations)**

75. L. Helmink, M.P.A. Sellink, and F.W. Vaandrager. Proof-checking a data link protocol. In H. Barendregt and T. Nipkow, editors, *Proceedings International Workshop TYPES'93*, Nijmegen, The Netherlands, May 1993. LNCS 806, pages 127–165. Springer-Verlag, 1994. **(Scholar: 209)**

76. F.W. Vaandrager. Expressiveness results for process algebras. In J.W. de Bakker, W.P. de Roever, and G. Rozenberg, editors, *Proceedings REX Workshop on Semantics: Foundations and Applications*. LNCS 666, pages 609–638. Springer-Verlag, 1993. **(Scholar: 87)**

77. F.W. Vaandrager and N.A. Lynch. Action transducers and timed automata. In W.R. Cleaveland, editor, *Proceedings* 3^{rd} *International Conference on Concurrency Theory (CONCUR'92)*, Stony Brook, New York. LNCS 630, pages 436–455. Springer-Verlag, 1992. **(CORE: A)**
Full version appeared in *Formal Aspects of Computing*.

78. L. Aceto, B. Bloom, and F.W. Vaandrager. Turning SOS rules into equations. In *Proceedings* 7^{th} *Annual Symposium on Logic in Computer Science (LICS'92)*, Santa Cruz, California, pages 113–124. IEEE Computer Society Press, 1992. **(CORE: A*)**
Full version appeared in *Information and Computation*.

79. N.A. Lynch and F.W. Vaandrager. Forward and backward simulations for timing-based systems. In J.W. de Bakker, C. Huizing, W.-P de Roever, and G. Rozenberg, editors, *Proceedings REX Workshop on Real-Time: Theory in Practice*. LNCS 600, pages 397–446. Springer-Verlag, 1992. **(Scholar: 205)**

80. F.W. Vaandrager. On the relationship between process algebra and input/output automata (extended abstract). In *Proceedings* 6^{th} *Annual Symposium on Logic in Computer Science (LICS'91)*, Amsterdam, pages 387–398. IEEE Computer Society Press, 1991. **(CORE: A*) (Scholar: 147 citations)**

81. R.J. van Glabbeek and F.W. Vaandrager. The difference between splitting in n and $n+1$. In E. Best and G. Rozenberg, editors, *Proceedings* 3^{rd} *Workshop on Concurrency and Compositionality*, Goslar, GMD-Studien Nr. 191, pages 117–121. Universität Hildesheim, 1991.
Full version appeared in *Information and Computation*.

82. R. De Nicola, U. Montanari, and F.W. Vaandrager. Back and forth bisimulations. In J.C.M. Baeten and J.W. Klop, editors, *Proceedings First International Conference on Concurrency Theory (CONCUR'90)*, Amsterdam. LNCS 458, pages 152–165. Springer-Verlag, 1990. **(CORE: A) (Scholar: 185)**

83. J.F. Groote and F.W. Vaandrager. An efficient algorithm for branching bisimulation and stuttering equivalence. In M.S. Paterson, editor, *Proceedings* 17^{th} *Int'l Coll. Automata, Languages and Programming (ICALP'90)*, Warwick. LNCS 443, pages 626–638. Springer-Verlag, 1990. **(CORE: A) (Scholar: 334)**

84. R. De Nicola and F.W. Vaandrager. Three logics for branching bisimulation (extended abstract). In *Proceedings* 5^{th} *Annual Symposium on Logic in Computer Science (LICS'90)*, Philadelphia, pages 118–129. IEEE Computer Society Press, 1990. **(CORE: A*)**
Full version appeared in *Journal of the ACM*.

85. R. De Nicola and F.W. Vaandrager. Action versus state based logics for transition systems. In I. Guessarian, editor, *Semantics of Systems of Concurrent Processes, Proceedings LITP Spring School on Theoretical Computer Science*, La Roche Posay, France. LNCS 469, pages 407–419. Springer-Verlag, 1990. **(Scholar: 507)**

86. J.F. Groote and F.W. Vaandrager. Structured operational semantics and bisimulation as a congruence (extended abstract). In G. Ausiello, M. Dezani-Ciancaglini, and S. Ronchi Della Rocca, editors, *Proceedings* 16^{th} *Int'l Coll. Automata, Languages and Programming (ICALP'89)*, Stresa. LNCS 372, pages 423–438. Springer-Verlag, 1989. **(CORE: A) (Scholar: 119)**
Full version appeared in *Information and Computation*.

87. R.J. van Glabbeek and F.W. Vaandrager. Modular specifications in process algebra – with curious queues (extended abstract). In M.Wirsing and J.A. Bergstra, editors, *Proceedings METEOR Workshop on Algebraic Methods: Theory, Tools and Applications*. LNCS 394, pages 465–506. Springer-Verlag, 1989.
Full version appeared in *Theoretical Computer Science*.

88. R.J. van Glabbeek and F.W. Vaandrager. Petri net models for algebraic theories of concurrency. In J.W. de Bakker, A.J. Nijman, and P.C. Treleaven, editors, *Proceedings PARLE conference*, Eindhoven, *Vol. II (Parallel Languages)*. LNCS 259, pages 224–242. Springer-Verlag, 1987. **(Scholar: 421)**

Chapters in Books (No Anonymous Peer Reviewing)

1. Twan Basten, Martijn Hendriks, Nikola Trčka, Lou Somers, Marc Geilen, Yang Yang, Georgeta Igna, Sebastian Smet, Marc Voorhoeve, Wil van der Aalst, Henk Corporaal, and Frits Vaandrager. Model-driven design-space exploration for software-intensive embedded systems. In Twan Basten, Roelof Hamberg, Frans Reckers, and Jacques Verriet, editors, *Model-Based Design of Adaptive Embedded Systems*, volume 22 of *Embedded Systems*, pages 189–244. Springer New York, 2013.

2. F.W. Vaandrager Does it Pay Off? Model-Based Verification and Validation of Embedded Systems! In PROGRESS White Papers 2006. STW, pages 43-66. 2006. ISBN-10: 90-73461-00-6 and ISBN-13: 978-90-73461-00-0.

3. A. Fehnker, M. Zhang, and F.W. Vaandrager. Modeling and Verifying a Lego Car Using Hybrid I/O Automata. M. Broy and M. Pizka, editors. *Models, Algebras, and Logic of Engineering Software*, Nato ASI Series III: Computer and Systems Sciences, Volume 191, pages 385–402, IOS Press, 2003.

4. F.W. Vaandrager. Hybrid systems. In *Images of SMC Research 1996*, pages 305–316, Stichting Mathematisch Centrum, Amsterdam, 1996.

5. D.J.B. Bosscher, I. Polak, and F.W. Vaandrager. Verification of an audio control protocol. In T. Rus and C. Rattray, editors, *Theories and Experiences for Real-Time System Development*, AMAST Series in Computing, Vol 2, pages 147–176, World Scientific, Singapore, 1994.

6. F.W. Vaandrager. Verification of a distributed summation algorithm. In K.R. Apt, A. Schrijver, and N.M. Temme, editors, *From Universal Morphisms to Megabytes – a Baayen Space Odyssey*, pages 593–608, CWI, Amsterdam, December 1994.

7. F.W. Vaandrager. Informatica en rationalisme. In H.J.M. Goeman and W.A. Kosters, editors, *Liber Amicorum voor A. Ollongren*, Department of Computer Science, Leiden University, December 1993. (In Dutch)

8. F.W. Vaandrager. Two simple protocols. In J.C.M. Baeten, editor, *Applications of process algebra*, Cambridge Tracts in Theoretical Computer Science 17, pages 23–44. Cambridge University Press, 1990.

9. F.W. Vaandrager. Process algebra semantics of POOL. In J.C.M. Baeten, editor, *Applications of process algebra*, Cambridge Tracts in Theoretical Computer Science 17, pages 173–236. Cambridge University Press, 1990. **(Scholar: 70)**

10. F.W. Vaandrager. Some observations on redundancy in a context. In J.C.M. Baeten, editor, *Applications of process algebra*, Cambridge Tracts in Theoretical Computer Science 17, pages 237–260. Cambridge University Press, 1990.

11. J.C.M. Baeten and F.W. Vaandrager. An algebra for process creation. In *J.W. de Bakker, 25 Jaar Semantiek – Liber Amicorum*, pages 57–81, CWI, Amsterdam, April 1989.

Other Publications

1. F.W. Vaandrager. Model-checkers als Slimme Schroevendraaiers. *Bits & Chips* 8:56–57, October-November 2012.
2. F.W. Vaandrager. Uppaal voor beginners. Course notes, Januari 2010.
3. F.W. Vaandrager. Wat is model checking? Course notes, March 2008.
4. F.W. Vaandrager. Modelgebaseerde Verificatie en Validatie Loont. *Bits & Chips* 8(15):53–55, 28 September 2006.
5. B.P.F. Jacobs and F.W. Vaandrager. Onderzoeksagenda remt innovatief onderzoek. *Automatisering Gids* 37(28):13, 9 July 2004.
6. H. Bohnenkamp, H. Hermanns, M. Zhang, and F. Vaandrager. Cost-Optimisation of the IPv4 Zeroconf Protocol. *Proceedings of the 3rd PROGRESS Workshop on Embedded Systems*, Utrecht, the Netherlands, 2002.
7. F.W. Vaandrager. De Verleidingen van het Hitlijstdenken. *Automatisering Gids* 34(19):23, May 12, 2000.
8. F.W. Vaandrager. Quality of Software — Formal Methods and Tools: Research profile for the Computing Science Institute Nijmegen (CSI). Note CSI-N0001, Computing Science Institute, University of Nijmegen, March 2000.
9. F.W. Vaandrager Nederlandse informatici tellen wel mee. KUnieuws, 29(24), March 17, 2000.
10. F.W. Vaandrager. Nederlandse Informatici tellen mee! U-Blad, 31(27), March 23, 2000.
11. F.W. Vaandrager. Nieuwe Citatie-Index Voorkomt Dubbel Werk. *Automatisering Gids* 34(8):19, February 25, 2000.
12. F.W. Vaandrager. Introduction. In G. Rozenberg and F.W. Vaandrager, editors. *Lectures on Embedded Systems*. LNCS 1494, pages 1–3. Springer-Verlag, 1998.
13. F.W. Vaandrager. Logica is prachtig hulpmiddel bij oplossen informaticaproblemen. *Automatisering Gids* 32(13):17, March 27, 1998.
14. R. De Nicola, U. Goltz, and F.W. Vaandrager (editors). Expressiveness in Concurrency. Dagstuhl-Seminar-Report; 156 16.09.-20.09.96 (9638), IBFI GmbH, Schloss Daghstuhl, Wadern, Germany, 1997.
15. F.W. Vaandrager. De Ingebouwde Informatica. Katholieke Universiteit Nijmegen, December 1996. Inaugural speech, ISBN 90-9010201-9.
16. D.K. Hammer and F.W. Vaandrager. Ingebouwde systemen nog verre van feilloos. *Automatisering Gids* 30(17):17, April 26, 1996. An extended abstract of this paper has appeared as: Ingebouwde Systemen, in *VIE-jaarboek 1996*, pages 54–62, Vereniging van Informatica-ingenieurs Eindhoven, 1996.
17. F.A.J. Birrer & F.W. Vaandrager. Politie-informatiesystemen, automatisering en privacy. In *Kwartaalschrift Privacy en Persoonsregistratie*, 10(3):15–19, 1985.

Technical Reports

1. Frits Vaandrager, P. Fiterău-Broştean, and Ivo Melse. Completeness of FSM Test Suites Reconsidered. CoRR arXiv:2410.19405v1, October 2024.

2. V. Bruyère, B. Garhewal, G.A. Pérez, Gaëtan Staquet, and F.W. Vaandrager. Active Learning of Mealy Machines with Timers. CoRR arXiv:2403.02019, March 2024.

3. F.W. Vaandrager and T. Wißmann. Action Codes. CoRR arXiv:2301.00199, 2023.

4. F.W. Vaandrager, B. Garhewal, J. Rot, and T. Wißmann. A New Approach for Active Automata Learning Based on Apartness. CoRR arXiv:2107.05419, July 2021.

5. A. Linard, C. de la Higuera, and F.W. Vaandrager. Learning Unions of k-Testable Languages. CoRR arXiv:1812.08269, December 2018.

6. Alexis Linard, Rick Smetsers, Frits W. Vaandrager, Umar Waqas, Joost van Pinxten, and Sicco Verwer. Learning Pairwise Disjoint Simple Languages from Positive Examples. CoRR arXiv:1706.01663, June 2017.

7. F. Aarts, B. Jonsson, J. Uijen, and F.W. Vaandrager. Generating Models of Infinite-State Communication Protocols using Regular Inference with Abstraction. Technical report ICIS-R13001, ICIS, Radboud University Nijmegen, January 2013.

8. M. Hendriks and F.W. Vaandrager. Reconstructing Critical Paths from Execution Traces. Technical Report ICIS-R12007, ICIS, Radboud University Nijmegen, December 2012.

9. J. Berendsen, D.N. Jansen, and F.W. Vaandrager. Fortuna: Model Checking Priced Probabilistic Timed Automata. Technical Report, Radboud University Nijmegen, 2010.

10. J. Berendsen, B. Gebremichael, F.W. Vaandrager, and Miaomiao Zhang. Formal Specification and Analysis of Zeroconf using Uppaal. Technical Report ICIS-R07032, ICIS, Radboud University Nijmegen, December 2007.

11. R. Hamberg and F.W. Vaandrager. Using Model Checkers in an Introductory Course on Operating Systems. Technical Report ICIS-R07031, ICIS, Radboud University Nijmegen, December 2007.

12. J. Berendsen and F.W. Vaandrager. Compositional Abstraction in Real-Time Model Checking. Technical Report ICIS-R07027, ICIS, Radboud University Nijmegen, November 2007.

13. F.W. Vaandrager. Does it Pay Off? Model-Based Verification and Validation of Embedded Systems! Technical Report ICIS-R0619, ICIS, Radboud University Nijmegen, 2006.

14. B. Gebremichael, F.W. Vaandrager, and M. Zhang. Analysis of a Protocol for Dynamic Configuration of IPv4 Link Local Addresses using Uppaal. Technical Report ICIS-R0616, ICIS, Radboud University Nijmegen, 2006.

15. L. Cheung, M.I.A. Stoelinga, and F.W. Vaandrager. A Testing Scenario for Probabilistic Processes. Technical Report ICIS-R06002, ICIS, Radboud University Nijmegen, January 2006.

16. B. Gebremichael, F.W. Vaandrager, and M. Zhang. Formal Models of Guaranteed and Best-Effort Services for Networks on Chip. Technical Report ICIS-R05016, ICIS, Radboud University Nijmegen, March 2005.

17. B. Gebremichael and F.W. Vaandrager. Specifying Urgency in Timed I/O Automata. Technical Report NIII-R0459, NIII, Radboud University Nijmegen, December 2004.

18. F.W. Vaandrager and A.L. de Groot. Analysis of a Biphase Mark Protocol with Uppaal and PVS. Technical Report NIII-R0445, NIII, Radboud University Nijmegen, November 2004.

19. N.A. Lynch, R. Segala, and F.W. Vaandrager. Compositionality for Probabilistic Automata. Technical Report NIII-R0444, NIII, Radboud University Nijmegen, November 2004.

20. L. Cheung, N.A. Lynch, R. Segala, and F.W. Vaandrager. Switched Probabilistic I/O automata. Technical Report NIII-R0437, NIII, Radboud University Nijmegen, June 2004.

21. M. Hendriks, N.J.M. van den Nieuwelaar, and F.W. Vaandrager. Model Checker Aided Design of a Controller for a Wafer Scanner. Technical Report NIII-R0430, NIII, University of Nijmegen, June 2004.

22. M. Hendriks, G. Behrmann, K.G. Larsen, P. Niebert, and Frits Vaandrager. Adding Symmetry Reduction to Uppaal. Technical Report NIII-R0407, NIII, University of Nijmegen, February 2004.

23. D.K. Kaynar, N.A. Lynch, R. Segala, and F.W. Vaandrager. The Theory of Timed I/O Automata. Technical Report MIT-LCS-TR-917, MIT Laboratory for Computer Science, Cambridge, MA, 2003.

24. B. Gebremichael and F.W. Vaandrager. Control Synthesis for a Smart Card Personalization System Using Symbolic Model Checking. Technical Report NIII-R0312, NIII, University of Nijmegen, May 2003.

25. A. Fehnker, M. Zhang, and F.W. Vaandrager. Modeling and Verifying a Lego Car Using Hybrid I/O Automata. Technical Report NIII-R0308, NIII, University of Nijmegen, March 2003.

26. N.A. Lynch, R. Segala, and F.W. Vaandrager. Hybrid I/O automata. Technical Report MIT-LCS-TR-827d, MIT Laboratory for Computer Science, Cambridge, MA 02139, January 13, 2003. Also Technical Report NIII-R0201, NIII, University of Nijmegen, February 2002.

27. T.S. Hune, J.M.T. Romijn, M.I.A. Stoelinga, and F.W. Vaandrager. Linear parametric model checking of timed automata. Technical Report CSI-R0102, Computing Science Institute, University of Nijmegen, January 2001. Also available as BRICS Report RS-01-5, BRICS, Denmark, January 2001.

28. G. Behrmann, A. Fehnker, T.S. Hune, K.G. Larsen, P. Pettersson, J.M.T. Romijn, and F.W. Vaandrager. Minimum-Cost Reachability for Priced Timed Automata. Technical Report CSI-R0109, Computing Science Institute, University of Nijmegen, March 2001. Also available as BRICS Report RS-01-3, BRICS, Denmark, January 2001.

29. W.O.D. Griffioen and F.W. Vaandrager. A Theory of Normed simulations. Technical Report CSI-R0013, Computing Science Institute, University of Nijmegen, July 2000.

30. N.A. Lynch, R. Segala, F.W. Vaandrager, and H.B. Weinberg. Hybrid I/O automata. Technical Report CSI-R9907, Computing Science Institute, University of Nijmegen, April 1999. A preliminary version of this report appeared as Report CS-R9578, CWI, Amsterdam, December 1995, and as Technical Memo MIT/LCS/TM-544, MIT LCS, Cambridge, MA, USA, December 1995.

31. M.I.A. Stoelinga and F.W. Vaandrager. Root Contention in IEEE 1394. Technical Report CSI-R9905, Computing Science Institute, University of Nijmegen, March 1999.

32. H. Dierks, A. Fehnker, A. Mader, and F.W. Vaandrager. Operational and logical semantics for polling real-time systems. Technical Report CSI-R9813, Computing Science Institute, University of Nijmegen, April 1998.

33. M.C.A. Devillers, W.O.D. Griffioen, J.M.T. Romijn, and F.W. Vaandrager. Verification of a Leader Election Protocol — Formal Methods Applied to IEEE 1394. Technical Report CSI-R9728, Computing Science Institute, University of Nijmegen, December 1997.

34. J.G. Springintveld, F.W. Vaandrager, and P.R. D'Argenio. Testing Timed Automata. Technical Report CSI-R9712, Computing Science Institute, University of Nijmegen, August 1997. Also available as CTIT Technical Report 97-17, Centre for Telematics and Information Technology, University of Twente, September 1997.

35. J.M.T. Romijn and F.W. Vaandrager. A note on fairness in I/O automata. Report CS-R9579, CWI, Amsterdam, December 1995.

36. N.A. Lynch, R. Segala, F.W. Vaandrager, and H.B. Weinberg. Hybrid I/O automata. Report CS-R9578, CWI, Amsterdam, December 1995. Technical Memo MIT/LCS/TM-544, MIT LCS, Cambridge, MA, USA, December 1995.

37. R.J. van Glabbeek and F.W. Vaandrager. The difference between splitting in n and $n+1$. Report CS-R9553, CWI, Amsterdam, July 1995.

38. F.W. Vaandrager. Verification of a distributed summation algorithm. Report CS-R9505, CWI, Amsterdam, January 1995.

39. F.W. Vaandrager and N.A. Lynch. Action transducers and timed automata. Report CS-R9460, CWI, Amsterdam, November 1994. Technical Memo MIT/LCS/TM-480.b, MIT LCS, Cambridge, MA, USA, October 1994.

40. D.J.B. Bosscher, I. Polak, and F.W. Vaandrager. Verification of an audio control protocol. Report CS-R9445, CWI, Amsterdam, July 1994.

41. L. Helmink, M.P.A. Sellink, and F.W. Vaandrager. Proof-checking a data link protocol. Logic Group Preprint Series No. 109, Department of Philosophy, Utrecht University, March 1994. Report CS-R9420, CWI, Amsterdam, March 1994.

42. A.S.A. Jeffrey, S.A. Schneider, and F.W. Vaandrager. A comparison of additivity axioms in timed transition systems. Report CS-R9366, CWI, Amsterdam, November 1993. Computer Science Technical Report 93/11, School of Cognitive and Computing Sciences, University of Sussex, 1993.

43. N.A. Lynch and F.W. Vaandrager. Forward and backward simulations Part II: Timing-based systems. Technical Memo MIT/LCS/TM-487.c (replaces TM-487 and TM-487.b and Report CS-R9314, CWI, Amsterdam, March 1993), MIT LCS, Cambridge, MA, USA, April 1995.

44. N.A. Lynch and F.W. Vaandrager. Forward and backward simulations Part I: Untimed systems. Report CS-R9313, CWI, Amsterdam, March 1993. Technical Memo MIT/LCS/TM-486.b (new version of TM-486), MIT LCS, Cambridge, MA, USA, August 1994.

45. F.W. Vaandrager. Expressiveness results for process algebras. Report CS-R9301, CWI, Amsterdam, January 1993.

46. F.W. Vaandrager and N.A. Lynch. Action transducers and timed automata (preliminary version). Technical Memo MIT/LCS/TM-480, MIT LCS, Cambridge, MA, USA, November 1992.

47. R. De Nicola and F.W. Vaandrager. Three logics for branching bisimulation. Report CS-R9012, CWI, Amsterdam, June 1990. Rapporto di Ricerca SI-92/07, Dipartimento di Scienze dell'Informazione, Università degli Studi di Roma "La Sapienza", Italy, November 1992.

48. L. Aceto, B. Bloom, and F.W. Vaandrager. Turning SOS rules into equations. Report CS-R9218, CWI, Amsterdam, June 1992.

49. N.A. Lynch and F.W. Vaandrager. Forward and backward simulations for timing-based systems. Technical Memo MIT/LCS/TM-458, MIT LCS, Cambridge, MA, USA, November 1991.

50. J.C.M. Baeten and F.W. Vaandrager. An algebra for process creation. Report CS-R8907, CWI, Amsterdam, March 1989. Computing Science Note 91/30, Eindhoven University of Technology, November 1991.

51. R.J. van Glabbeek and F.W. Vaandrager. Modular specification of process algebras. TUM report I9051 (= SFB-Bericht Nr. 342/28/90 A), Technische Universität München, Germany, December 1990.

52. R. De Nicola, U. Montanari, and F.W. Vaandrager. Back and forth bisimulations. Report CS-R9021, CWI, Amsterdam, May 1990.

53. J.F. Groote and F.W. Vaandrager. An efficient algorithm for branching bisimulation and stuttering equivalence. Report CS-R9001, CWI, Amsterdam, January 1990.

54. F.W. Vaandrager. A simple definition for parallel composition of prime event structures. Report CS-R8903, CWI, Amsterdam, March 1989. **(Scholar: 53)**

55. J.F. Groote and F.W. Vaandrager. Structured operational semantics and bisimulation as a congruence. Report CS-R8845, CWI, Amsterdam, November 1988.

56. F.W. Vaandrager. Determinism → (event structure isomorphism = step sequence equivalence). Report CS-R8839, CWI, Amsterdam, October 1988.

57. J.C.M. Baeten and F.W. Vaandrager. Specification and verification of a circuit in ACP. Report P8821 (replaces P8803), Programming Research Group, University of Amsterdam, October 1988.

58. R.J. van Glabbeek and F.W. Vaandrager. Modular specifications in process algebra — with curious queues. Report CS-R8821, CWI, Amsterdam, May 1988.

59. F.W. Vaandrager. Some observations on redundancy in a context. Report CS-R8812, CWI, Amsterdam, March 1988.

60. F.W. Vaandrager. Process algebra semantics of POOL. Report CS-R8629, CWI, Amsterdam, August 1986.

61. F.W. Vaandrager. Verification of two communication protocols by means of process algebra. Report CS-R8608, CWI, Amsterdam, January 1986. **(Scholar: 75)**