

---

Work address: Department of IT, Uppsala University, 751 05, Uppsala, Sweden  
Tel: +46 70 4250293, Web: <http://user.it.uu.se/~yi/> and Email: [yi@it.uu.se](mailto:yi@it.uu.se)  
Home address: Långvägen 28, 756 52, Uppsala, Sweden

## Education and Qualifications

- Docent in Computer Systems, Uppsala University, Sweden, 1996
- Ph.D. in Computer Science, Chalmers University of Technology, Sweden, 1991
- Licentiate in Computer Science, Chalmers University of Technology, 1988
- B.Sc. in Computer Science, North Eastern University, China, 1982

## Awards and Honors

- CAV Award 2013
- Best Paper Award of RTSS 2017
- Best Paper Award of RTSS 2015
- Best Paper Award of ECRTS 2015
- Best Paper Award of DATE 2013
- Best Paper Award of RTSS 2009
- Best Tool Paper Award of ETAPS 2002
- Outstanding Paper Award of ECRTS 2013
- Ph.D. Supervisor of:
  - Pontus Ekberg, Bjurzons Premium Prize for his Ph.D. thesis, Uppsala University, 2016
  - Nan Guan, EDAA Outstanding Dissertation Award, European Design Automation Association, 2014
  - Pavel Krchal, Naturvetarna's Best Swedish Thesis Award, the Royal Academy of Sciences, 2009
- IEEE Fellow for contributions to safety-critical real-time systems (elected 2014)
- Member of Academy of Europe, Section of Informatics (elected 2015)
- Member of Royal Society of Sciences, Class of Physics-Mathematics (elected 2017)

## Employment Record

- Chair Professor in Embedded Systems, Uppsala University, 2009 –
- Professor in Real-Time Systems, Uppsala University, 2000-2009
- Associate Professor in Computer Systems, Uppsala University, 1996-2000
- Senior Lecturer in Computer Systems, Uppsala University, 1992-1996
- Postdoc Fellow, Aalborg University, Denmark, 1991-1992
- System Engineer, Volvo Data, Gothenburg, 1988-1989
- Ph.D. Position, Chalmers University of Technology, 1985-1990

## Other Positions

- Distinguished professor, North Eastern University, China, since 2007
- Visiting professor, Inst. of Software, Chinese Academy of Sciences, 2002 - 2007
- Visiting professor, National University of Singapore, 2003
- Visiting professor, Institute of Software Technology, United Nation University, 2002
- Visiting professor, MRTC, Malardalen University, Sweden, 1998-2002

### **University Service at Uppsala (selected)**

- Director of Research Education (Ph.D. Education), Information Technology, 2006 –
- Board Member of UPMARC: Uppsala Prog. for Multicore Architectures Research Center, 2010 – 2015
- Founding Director of M.Sc Program in Embedded Systems, 2010 – 2011
- Member of Research Education Committee, Faculty of Natural Sciences and Technology, 2006 – 2015
- Member of Normination Committee, Faculty of Science and Technology, 2007 – 2010
- Member of Gender Equity Group, Department of Information Technology, 2004 – 2007
- Board Member of Department of Information Technology, 1999 – 2000
- Director of Research Education (Ph.D. Education), Computer Systems, 1998 – 1999

### **Editorial Boards**

- Associate Editor, ACM Transactions on Embedded Computing Systems, 2017 –
- Associate Editor, IEEE Journal, Embedded System Letters, 2016 –
- Associate Editor, IEEE Journal, Design and Test, 2016 –
- Associate Editor, IEEE Transactions on Computers, 2002-2007
- Associate Editor, Elsevier Journal of Systems Architecture, 2009 – 2015
- Associate Editor, Journal of Computer Science and Technology (Chinese Academy of Sciences), 2007 –
- Guest editor for Nordic Journal of Computing (2005, 2000), Journal on Software Tools for Technology Transfer (2002), and ACM Transactions on Embedded Computing Systems (2007)

### **Steering Committees (SC) etc.**

- Advisory Board Member, SETTA, Symposium on Dependable Software Engineering, China, 2017 –
- Chair of Award (Selection) Committee, ACM Caspi Dissertation Award, 2016 –
- Board Member of Directors, ACM SIGBED (Embedded Systems), 2016 –
- SC Member, ESWEEK (Embedded Systems Week: CASES, CODES+ISSS, EMSOFT), 2013 –
- SC Co-Chair, EMSOFT, ACM/IEEE Conf. on Embedded Software, 2006 –
- SC Member, LCTES, ACM Conf. on Lang., Compilers, Tools & Theory for Emb. Sys., 2012 –
- SC Member, FORMATS, Conf. on Formal Modelling and Analysis of Timed Systems, 2003 – 2017
- SC Member, ARTIST/China Summer School on Embedded Systems Design since 2006 - 2011
- SC Member, ARTIST Working Group on Education in Embedded Software and Systems, 2001-2004
- SC Member, CUE (China, US and Europe) <sup>1</sup> initiative on Informatics, 2002-2005

### **Program Committees (PC) etc.**

- PC Chair, SETTA, Symposium on Dependable Software Engineering, 2015
- PC Chair, LCTES, Conf. on Languages, Compilers, Tools and Theory for Embedded Systems, 2012
- PC Chair, HSCC, ACM Int. Conf. on Hybrid Systems: Computation and Control (HSCC), 2010
- PC Chair, EMSOFT, ACM/IEEE Conf. on Embedded Software, 2006
- PC Chair, FORMATS, Int. Conf. on Formal Modelling and Analysis of Timed Systems, 2005
- PC Chair, TACAS, Int. Conf. on Tools & Algorithms for Construction & Analysis of Systems, 2001
- Track Chair, RTSS, Design & Verification, the 32th IEEE Real-Time Systems Symposium, 2008
- Topic Chair, DATE, Model based Design and Verification of Embedded Systems, 2012-2014
- Tool Chair of FTRTFT: Sch. and Symp. on Formal Tech. in RT & Fault-Tolerant Systems, 1996
- PC Chair, NWPT, Nordic Workshop on Programming Theory, 1999 and 2004
- PC Chair, RTTOOLS: Workshop on Real-Time Tools (affiliated with CAV), 2002
- PC Member of:

<sup>1</sup>CUE is an international research collaboration initiative (2002-2005), started by Armando Haeberer, the late Director of UNU International Institute of Software Technology, Macau and supported by the Chinese CNSF, US NSF and EC.

- SETTA, Symposium on Dependable Software Engineering, 2015 – 2017
- RTSS: IEEE Real-Time Systems Symposium, 2008 – 2015, 2017
- EMSOFT: ACM/IEEE Conference on Embedded Software, 2006 and 2011 – 2014, 2016-2017
- RTNS: International Conference on Real-Time and Network Systems, 2012, 2017
- RTCSA: IEEE Conf. on Embedded and Real Time Comp. Sys. & Applications, 2002–2006, 2017
- RTAS: IEEE Real Time and Embedded Technology and Applications Symp., 2007-2008, 2011 - 2016
- DATE - Design, Automation and Test in Europe, 2009 – 2016
- ECRTS: Euromicro Conference on Real-Time Systems, 1999, 2000, 2006 and 2015
- HSCC: ACM Conference on Hybrid Systems: Computation and Control, 2010
- SAC: ACM Symposium on Applied Computing, 2009 - 2015
- ISCT: IEEE Conference on Software Testing, Verification, and Validation, 2009
- TACAS: Conf. on Tools & Algorithms for Construction & Analysis of Systems, 2000–2002 and 2006
- PSI: A.P. Ershov Conference Perspectives in System Informatics, 2003, 2006 and 2009
- TASE: IEEE and IFIP Symposium on Theoretical Aspects of Software Engineering, 2007 – 2016
- ICECCS: IEEE Conference on Engineering of Complex Computer Systems, 2007
- ATVA: Symposium on Automated Technology for Verification and Analysis, 2006 - 2016
- FMOODS: IFIP Conference on Formal Methods for Open Object-Based Distributed Systems, 2007
- CONCUR: Conference on Concurrency Theory, 2000 and 2004
- APLAS: ASIAN Symposium on Programming Languages and Systems, 2005
- FORMATS: Conf. on Formal Modelling and Analysis of Timed Systems, 2003–2005 and 2008
- SEFM: IEEE Conference on Software Engineering and Formal Methods, 2003–2005
- ICTAC: Colloquium on Theoretical Aspects of Computing, 2004
- ICFEM: Conference on Formal Engineering Methods, 2002–2016
- ACS: Conference on Applications of Concurrency to System Design, 2003
- CAV: Conference on Computer-Aided Verification, 2002
- LCTES: ACM Conf. on Languages, Compilers, and Tools for Embedded Systems, 2000, 2013 – 2015

#### **Member of Organization Committees**

- ETAPS: European Joint Conferences on Theory and Practice of Software, Uppsala, 2017
- ESWEEK: Cyber Physical Systems Week, Stockholm, 2010
- ARTIST2 Summer School on Component & Modelling, Testing & Verification, and Statical Analysis of Embedded Systems, Stockholm, 2005
- FORMATS: Conf. on Formal Modelling and Analysis of Timed Systems, Uppsala, 2005 (Chair)
- NWPT: Nordic Workshop on Programming Theory, Uppsala, 1999 and 2004 (Chair)
- FTRTFT: Sch. and Symp. on Formal Techn. in RT & Fault Tolerant Systems, Uppsala, 1996
- CONCUR: Conf. on Concurrency Theory, Uppsala, 1994
- NWPT: Nordic Workshop on Program Correctness, Gothenburg, 1992
- Chalmers Workshop on Concurrency, Båstad, Sweden, 1991

#### **Evaluation and Reviewing (selected)**

- Panel member, Finish Natural Science Foundation, Academy of Finland, 2014
- Panel member, National Lab. of Computer Science, Chinese Academy of Sciences, 2013
- Panel member, INRIA ICT Evaluation (Embedded Systems), 2012
- Reviewer, Swedish KK Foundation (KK-Stiftelsen), 2014
- Reviewer of ITEA-project (Inform. Techn. for European Advancement), TIMMO-2-USE, 2012
- Reviewer for the ARC Centres of Excellence Programme of the Australian Research Council 2002-2004
- Reviewer for the Netherlands Organisation for Scientific Research (NWO), National University of Singapore, Irish Science Foundation and the Czech Science Foundation.
- Reviewer (sakkuninga) for professorship/faculty positions at National University of Singapore, Hong Kong Polytechnic University, Beijing University (China), University of Hamstad (Sweden), Teesside University (UK), Mälardalen University (Sweden), Linköpings university (Sweden), and Vienna University of Technology.

## **Entrepreneur- and Leader-ship**

- Completion of 3-week program on leadership by the Swedish Institute of Management (IFL), 1995
- Founder of Education (M.Sc) Program in Embedded Systems at Uppsala (started in 2010)
- Founder of the UPPAAL project (supported in 1993 by NUTEK – Swedish Agency for Technical Development), which lead to the successful development of UPPAAL between Uppsala and Aalborg University (CAV 2013 Award); the first prototype of UPPAAL was presented at FORTE'94:

Wang Yi, Paul Pettersson and Mats Daniels: *Automatic Verification of Real-Time Communicating Systems by Constraint Solving*. In Proceedings of the 7th IFIP WG6.1 International Conference on Formal Description Techniques, Berne, Switzerland, 1994. IFIP Conference Proceedings 6, Chapman & Hall, ISBN 0-412-64450-9

- Co-Founder of UP4ALL International AB (serving as CEO, 2004 - present)
- PI and area coordinator of the VR-supported Linnaeus centre UPMARC (Uppsala Programming for Multicore Architectures Research Center), Funding level: 64,000,000 SEK, 2008 - 2018
- PI and project leader of SSF-supported program, CoDeR MP (Computationally Demanding Real-Time Applications on Multicore Platforms) jointly with ABB Robotics and SAAB. Funding level: 20,000,000 SEK, 2009-2015
- PI for the VINNOVA-supported ASTEC (Advanced Software Technology Centre) and leaders for several industrial and leaders for several industrial projects with Volvo, Mecel AB, ABB within ASTEC, 1995 - 2005
- Site leader of the ARTIST Network of Excellence (Advanced Real-Time Systems in Information Society Technologies) of FP5, ARTIST2 of FP6 and ArtistDesign of FP7, 2000 - 2011
- Site leader of three large European IST/FP projects: WOODDES 1999-2003, CREDO 2006 - 2009 and CERTAINTY 2011 - 2014

## **Invited Talks (selected)**

- ICFEM17, the 19th International Conference on Formal Engineering Methods, 2017
- APSEC17, the 24th Asia-Pacific Software Engineering Conference, 2017
- SIES16, the 11th IEEE Intern. Symp. on Industrial Embedded Systems, Poland, May 2016
- Pasargad Summer School on Cyber-Physical Systems, Tehran, Iran, Sept. 2016
- UPMARC Summer School on Multicore Programming, Uppsala, June 2016
- ETAPS15, European Joint Conf. on Theory and Practice of Software, London, April 2015
- EATCS Young Researchers School on Automata, Logic and Games, Czech, Aug. 2014
- Nano-Tera/Artist Summer School on Embedded System Design (ETH & EPFL), France, Sept. 2013.
- The 12th Conf. on Formal Engineering Methods, Shanghai, China, Nov. 2010
- Summer School on Model Checking, Chinese Academy of Sciences, Beijing, Oct. 2010
- VTSA School, Verification Technology, Systems and Applications, Luxembourg, 2010
- The 10th School on Formal Methods for the Design of Computer, Communication and Software Systems: Quantitative Aspects of Programming Languages, Bertinoro, Italy, 2010
- ARTIST Summer School Europe 2010, Autrans, Grenoble, France, September 2010
- ARTIST Summer School China, Beijing, July 2010
- The 7th IEEE/IFIP International Conference on Embedded and Ubiquitous Computing, Vancouver, 2009
- ARTIST2 School on Modelling, Testing and Verification for Embedded Systems, Trento, 2007
- ARTIST-China School on Embedded Systems Design, SuZhou, China, 2007
- The 22nd Conf. on Mathematical Foundations of Programming Semantics, Genova, 2006
- ARTIST-China School on *Models, Methods and Tools for Embedded Systems*, Xian, China, 2006
- SIGPL Summer School, Seoul, Republic of Korea, 2005
- The 3rd Symposium on Formal Methods for Components and Objects, Leiden, 2004

- The 2nd Workshop on Quantitative Aspects of Programming Languages, ETAPS04, Barcelona, 2004
- Workshop: Beyond Safety, Schloss Ringberg, Germany, 2004
- Workshop on Constraint Programming and Constraints for Verification, ETAPS04, Barcelona, 2004
- European Summer School on Embedded Systems, Mälardalen University, Sweden, 2003
- The 7th Workshop on Formal Methods for Industrial Critical Systems (FMICS02), Malaga, Spain. 2002
- The 10th anniversary colloquium of UNU IIST, Formal Methods at the Crossroads from Panacea to Foundational Support, Portugal, 2002
- The 5th Winter School in Computer Science, Tallinn, Estonia, 2000
- Real-Time Systems (RTSS'95), Pisa, Italy, 1995 (invited tutorial on UPPAAL).
- Workshop on Logic and Software Engineering, Chinese Academy of Sciences, Beijing, 1995

**Supervised Ph.D. Students (and their first positions)**

- Pontus Ekberg, Ph.D. January 15, 2016, Postdoc, Uppsala University
- Zhang Yi, Ph.D. Oct, 2014 (at North Eastern Univ), Ass Prof. North Eastern Univ, China
- Martin Stigge, Ph.D. April 11, 2014, System Engineer, ARISTA Networks, Vancouver, Canada
- Nan Guan, Ph.D. 2013, Ass Prof., Hong Kong Polytechnic University
- Liu Ying, Ph.D. Oct, 2013 (at North Eastern Univ), Ass Prof., North Eastern Univ, China
- Rafal Somla, Ph.D. 2012, Software Architect, Oracle, Poland
- Fanxin Kong, Ph.D. June 2012 (at North Eastern Univ), Research Fellow, McGill Univ, Canada
- Pavel Krcaľ, Ph.D. 2009, System Analyst, Scandpower AB, Sweden
- John Håkansson, Ph.D. 2009 (with Paul Pettersson), Software Engineer, IAR Systems AB, Sweden
- Elena Fersman, Ph.D. 2004, Research manager, Ericsson Research, Sweden
- Alexandre David, Lic. 2001 and Ph.D. 2003, associate professor at Aalborg Univ., Denmark
- Tobias Amnell, Lic. 2003, System Engineer, SAAB Systems, Sweden
- Anders Wall, Lic. 1999 and Ph.D. 2003 (with Christer Nordstrom), Research manager, ABB Robotics
- Johan Bengtsson, Lic. 2001 and Ph.D. 2002. Software Engineer, IAR Systems AB, Sweden
- Fredrik Larsson, Lic. 2000, Manager, Voicecorp AB, Sweden
- Paul Pettersson, Ph.D. 1999, Professor, Rector of Mälardalen University, Sweden

---

H-Index:52 (Google Scholar)

**Software**

- [1] UPPAAL ([www.uppaal.org](http://www.uppaal.org)): a Model-Checker for Real Time Systems developed jointly by Uppsala University and Aalborg University (co-founder and team leader at Uppsala, received CAV Award 2013)
- [2] TIMES ([www.timestool.com](http://www.timestool.com)): a Tool for Implementation and Modelling of Embedded Systems developed at Uppsala University (co-founder and team leader, received ETAPS Tool Paper Award 2002)

**Peer-Reviewed Journal Papers**

- [1] Gang Chen, Nan Guan, Di Liu, Qingqiang He, Kai Huang, Todor Stefanov, Wang Yi: Utilization-Based Scheduling of Flexible Mixed-Criticality Real-Time Tasks. Accepted for publication in IEEE Transactions on Computers, 2018.
- [2] Tianyu Zhang, Nan Guan, Qingxu Deng, Wang Yi: Start time configuration for strictly periodic real-time task systems. *Journal of Systems Architecture - Embedded Systems Design* 66-67: 61-68 (2016)
- [3] Mingsong Lv, Nan Guan, Jan Reineke, Reinhard Wilhelm, and Wang Yi: A Survey on Static Cache Analysis for Real-Time Systems. *Leibniz Transactions on Embedded Systems, LITES* 3(1): 05:1-05:48 (2016)
- [4] Jinghao Sun, Nan Guan, Yang Wang, Qingxu Deng, Peng Zeng, Wang Yi: Feasibility of Fork-Join Real-Time Task Graph Models: Hardness and Algorithms. *ACM Trans. Embedded Comput. Syst. (TECS)* 15(1):14 (2016)
- [5] Pontus Ekberg, Wang Yi: Schedulability analysis of a graph-based task model for mixed-criticality systems. *Real-Time Systems (RTS)* 52(1):1-37 (2016)
- [6] Y Bi, M Lv, C Song, W Xu, N Guan, W Yi: Autodietary: A wearable acoustic sensor system for food intake recognition in daily life. *IEEE Sensors Journal* 16 (3), 806-816, 2016
- [7] Yin Bi, Mingsong Lv, Yangjie Wei, Nan Guan, Wang Yi: Multi-feature fusion for thermal face recognition, *Infrared Physics & Technology*, Volume 77, 2016, Pages 366-374.
- [8] Martin Stigge, Wang Yi: Combinatorial abstraction refinement for feasibility analysis of static priorities. *Real-Time Systems Journal*, 51(6):639-674 (2015)
- [9] Martin Stigge, Wang Yi: Graph-Based Models for Real-Time Workload: a Survey. *Real-Time Systems Journal*, 51(5):602-636 (2015)
- [10] Hao Lin, Wenyao Xu, Nan Guan, Dong Ji, Yangjie Wei, Wang Yi: Noninvasive and Continuous Blood Pressure Monitoring Using Wearable Body Sensor Networks. *IEEE Intelligent Systems* 30(6):38-48 (2015)
- [11] Pontus Ekberg, Nan Guan, Martin Stigge, Wang Yi: An optimal resource sharing protocol for generalized multiframe tasks. *Journal of Logical and Algebraic Methods in Programming* 84 (1), 92-105 (2015)
- [12] Nan Guan, Mingsong Lv, Wang Yi, Ge Yu: WCET analysis with MRU cache: Challenging LRU for predictability *ACM Transactions on Embedded Computing Systems (TECS)* 13 (4s), 123, (2014)
- [13] Chuanwen Li, Yu Gu, Jianzhong Qi, Ge Yu, Rui Zhang, Wang Yi: Processing Moving kNN Queries Using Influential Neighbor Sets. *PVLDB* 8(2): 113-124 (2014)

- [14] Changqing Xia, Nan Guan, Qingxu Deng, Wang Yi: Maximizing Lifetime of Three-Dimensional Corona-Based Wireless Sensor Networks. *IJDSN* 10 (2014)
- [15] Pontus Ekberg, Wang Yi: Bounding and shaping the demand of generalized mixed-criticality sporadic task systems. *Real-Time Systems Journal*, 50(1): 48-86 (2014)
- [16] Philip Axer, Rolf Ernst, Heiko Falk, Alain Girault, Daniel Grund, Nan Guan, Bengt Jonsson, Peter Marwedel, Jan Reineke, Christine Rochange, Maurice Sebastian, Reinhard von Hanxleden, Reinhard Wilhelm, Wang Yi: Building Timing Predictable Embedded Systems. *ACM Trans. Embedded Computing Systems (TECS)* 13(4): 82 (2014)
- [17] Martin Stigge, Pontus Ekberg, Wang Yi: The fork-join real-time task model. *SIGBED Review* 10(2): 20 (2013)
- [18] Nan Guan, Wang Yi, Qingxu Deng, Zonghua Gu, Ge Yu: Schedulability analysis for non-preemptive fixed-priority multiprocessor scheduling. *Journal of Systems Architecture - Embedded Systems Design* 57(5): 536-546 (2011)
- [19] Gerd Behrmann, Alexandre David, Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: Developing UPPAAL over 15 years. *Software Practice and Experience* 41(2): 133-142 (2011)
- [20] Parosh Aziz Abdulla, Pavel Krcl, Wang Yi: Sampled Semantics of Timed Automata. *Logical Methods in Computer Science* 6(3) (2010)
- [21] Immo Grabe, Mohammad Mahdi Jaghoori, Bernhard K. Aichernig, Christel Baier, Tobias Blechmann, Frank S. de Boer, Andreas Griesmayer, Einar Broch Johnsen, Joachim Klein, Sascha Klppelholz, Marcel Kyas, Wolfgang Leister, Rudolf Schlatte, Andries Stam, Martin Steffen, Simon Tschirner, Liang Xuedong, Wang Yi: Credo Methodology: Modeling and Analyzing A Peer-to-Peer System in Credo. *Electr. Notes Theor. Comput. Sci.* 266: 33-48 (2010)
- [22] Mingsong Lv, Nan Guan, Qingxu Deng, Ge Yu, Wang Yi: Static worst-case execution time analysis of the C/OS-II real-time kernel. *Frontiers of Computer Science in China* 4(1): 17-27 (2010)
- [23] Parosh Aziz Abdulla, Pavel Krcl, Wang Yi: Universality of R-automata with Value Copying. *Electr. Notes Theor. Comput. Sci.* 239: 131-141 (2009)
- [24] Jin Song Dong, Ping Hao, Shengchao Qin, Jun Sun, Wang Yi: Timed Automata Patterns. *IEEE Trans. Software Eng.* 34(6): 844-859 (2008)
- [25] Elena Fersman, Pavel Krcl, Paul Pettersson, Wang Yi: Task automata: Schedulability, decidability and undecidability. *Information and Computation* 205(8): 1149-1172 (2007)
- [26] Elena Fersman, Leonid Mokrushin, Paul Pettersson, Wang Yi: Schedulability analysis of fixed-priority systems using timed automata. *Theor. Comput. Sci.* 354(2): 301-317 (2006)
- [27] Paul Caspi, Alberto L. Sangiovanni-Vincentelli, Lus Almeida, Albert Benveniste, Bruno Bouys-sounouse, Giorgio C. Buttazzo, Ivica Crnkovic, Werner Damm, Jakob Engblom, Gerhard Fohler, Marisol Garca-Valls, Hermann Kopetz, Yassine Lakhnech, Franois Laroussinie, Luciano Lavagno, Giuseppe Lipari, Florence Maraninchi, Philipp Peti, Juan Antonio de la Puente, Norman Scaife, Joseph Sifakis, Robert de Simone, Martin Trngren, Paulo Verssimo, Andy J. Wellings, Reinhard Wilhelm, Tim A. C. Willemse, Wang Yi: Guidelines for a graduate curriculum on embedded software and systems. *ACM Trans. Embedded Comput. Syst. (TECS)* 4(3):587-611 (2005)
- [28] Jifeng He, Dang Van Hung, Geguang Pu, Zongyan Qiu, Wang Yi: Exploring optimal solution to hardware/software partitioning for synchronous model. *Formal Asp. Comput. (FAC)* 17(4):443-460 (2005)
- [29] Elena Fersman, Wang Yi: A Generic Approach to Schedulability Analysis of Real-Time Tasks. *Nord. J. Comput. (NJC)* 11(2):129-147 (2004)

- [30] Kim Guldstrand Larsen, Fredrik Larsson, Paul Pettersson, Wang Yi: Compact Data Structures and State-Space Reduction for Model-Checking Real-Time Systems. *Real-Time Systems Journal* 25(2-3):255-275 (2003)
- [31] Tiziana Margaria, Wang Yi: Introductory paper: scalability aspects of validation. *STTT* 5(1):1-3 (2003)
- [32] Huimin Lin, Wang Yi: Axiomatising timed automata. *Acta Inf. (ACTA)* 38(4):277-305 (2002)
- [33] Johan Bengtsson, W. O. David Griffioen, Kre J. Kristoffersen, Kim Guldstrand Larsen, Fredrik Larsson, Paul Pettersson, Wang Yi: Automated verification of an audio-control protocol using UPPAAL. *J. Log. Algebr. Program. (JLP)* 52-53:163-181 (2002)
- [34] Tobias Amnell, Elena Fersman, Paul Pettersson, Hongyan Sun, Wang Yi: Code Synthesis for Timed Automata. *Nord. J. Comput. (NJC)* 9(4):269-300 (2002)
- [35] Bengt Jonsson, Wang Yi: Testing preorders for probabilistic processes can be characterized by simulations. *Theor. Comput. Sci. (TCS)* 282(1):33-51 (2002)
- [36] Magnus Lindahl, Paul Pettersson, Wang Yi: Formal design and analysis of a gear controller. *STTT* 3(3):353-368 (2001)
- [37] Kim Guldstrand Larsen, Justin Pearson, Carsten Weise, Wang Yi: Clock Difference Diagrams. *Nord. J. Comput. (NJC)* 6(3):271-298 (1999)
- [38] Kim Guldstrand Larsen, Wang Yi: Time-abstracted Bisimulation: Implicit Specifications and Decidability. *Information and Computation* 134(2):75-101 (1997)
- [39] Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: UPPAAL in a Nutshell. *STTT* 1(1-2):134-152 (1997)

#### **Peer-Reviewed Conference Papers**

- [40] Jakaria Abdullah, Gaoyang Dai, Morteza Mohaqeqi and Wang Yi: Schedulability Analysis and Software Synthesis for Graph-Based Task Models with Resource Sharing. Accepted for publication at RTAS18.
- [41] Jie An, Naijun Zhan, Xiaoshan Li, Miaomiao Zhang and Wang Yi: Model Checking Continuous-time Bounded Extended Linear Duration Invariants. Accepted for publication at HSCC18.
- [42] Wang Yi: Towards Customizable CPS: Composability, Efficiency and Predictability. In proc. of ICFEM17. *Lecture Notes in Computer Science* 10610, Springer 2017. pages 3-15.
- [43] Pontus Ekberg and Wang Yi Fixed-Priority Schedulability of Sporadic Tasks on Uniprocessors is NP-hard, RTSS 2017 (Best Paper Award).
- [44] Jinghao Sun, Nan Guan, Yang Wang, Qingqing He Wang Yi: Scheduling and Analysis of Real-Time OpenMP Task Systems with Tied Tasks, RTSS 2017.
- [45] Yue Tang, Nan Guan, Weichen Liu, Linh Thi Xuan Phan and Wang Yi: Revisiting GPC and AND Connector in Real-Time Calculus, RTSS 2017.
- [46] Xu Jiang, Nan Guan, Xiang Long and Wang Yi: Semi-Federated Scheduling of Parallel Real-Time Tasks on Multiprocessors, RTSS 2017.
- [47] Morteza Mohaqeqi, Syed Md Jakaria Abdullah, Pontus Ekberg, Wang Yi: Refinement of Workload Models for Engine Controllers by State Space Partitioning. *ECRTS 2017*: 11:1-11:22
- [48] Zhiwei Feng, Nan Guan, Mingsong Lv, Weichen Liu, Qingxu Deng, Xue Liu, Wang Yi: Efficient drone hijacking detection using onboard motion sensors. *DATE 2017*: 1414-1419.
- [49] Morteza Mohaqeqi, Jakaria Abdullah, Wang Yi: An Executable Semantics for Synchronous Task Graphs: From SDRT to Ada. *Ada-Europe 2017*: 137-152.



- [50] J. Abdullah, G. Dai, N. Guan, M. Mohaqeqi, and W. Yi: Towards a Tool: TIMES-Pro for Modeling, Analysis, Simulation and Implementation of Cyber-Physical Systems. Larsen Festschrift, LNCS 10460, Chapter 31, 2017.
- [51] Jakaria Abdullah, Morteza Mohaqeqi, Wang Yi: Synthesis of ada code from graph-based task models. SAC 2017: 1467-1472.
- [52] Kai Lampka, Wang Yi, Steffen Bondorf, Jens Schmitt and Nan Guan. Generalized Finitary Real-Time Calculus. INFOCOM, 2017.
- [53] Yang Wang, Nan Guan, Jinghao Sun, Mingsong Lv, Qingqiang He, Tianzhang He, Wang Yi: Benchmarking OpenMP programs for real-time scheduling. RTCSA 2017: 1-10.
- [54] Morteza Mohaqeqi, Syed Md Jakaria Abdullah and Wang Yi: Modeling and Analysis of Data Flow Graphs using the Digraph Real-Time Task Model, Ada Europe 2016.
- [55] Syed Md Jakaria Abdullah, Kai Lampka, Wang Yi: Improving performance by monitoring while maintaining worst-case guarantees. DATE 2016: 257-260
- [56] Chuancai Gu, Nan Guan, Zhiwei Feng, Qingxu Deng, Xiaobo Sharon Hu, Wang Yi: Transforming Real-Time Task Graphs to Improve Schedulability. RTCSA 2016: 29-38
- [57] Morteza Mohaqeqi, Pontus Ekberg, Wang Yi: On Fixed-Priority Schedulability Analysis of Sporadic Tasks with Self-Suspension. RTNS 2016: 109-118
- [58] Di Liu, Jelena Spasic, Nan Guan, Gang Chen, Songran Liu, Todor Stefanov, Wang Yi: EDF-VD Scheduling of Mixed-Criticality Systems with Degraded Quality Guarantees. RTSS 2016: 35-46
- [59] Morteza Mohaqeqi, Syed Md Jakaria Abdullah, Nan Guan and Wang Yi: Schedulability Analysis of Synchronous Digraph Real-Time Tasks, ECRTS 2016.
- [60] Mingsong Lv, Nan Guan, Ye Ma, Dong Ji, Erwin Knippel, Xue Liu and Wang Yi: Speed Planning for Solar-Powered Electric Vehicles, e-Energy 2016, the 7th ACM International Conference on Future Energy Systems, 2016.
- [61] Philipp Rmmer, Wang Yi: Characterization of Simulation by Probabilistic Testing. Theory and Practice of Formal Methods 2016:360-372, LNCS 9660, 2016.
- [62] Pontus Ekberg, Wang Yi: Uniprocessor Feasibility of Sporadic Tasks Remains coNP-Complete under Bounded Utilization. RTSS 2015:87-95 (Best Paper Award)
- [63] Pontus Ekberg, Wang Yi: Uniprocessor Feasibility of Sporadic Tasks with Constrained Deadlines Is Strongly coNP-Complete. ECRTS 2015:281-286 (Best Paper Award)
- [64] Nan Guan, Yue Tang, Jakaria Abdullah, Martin Stigge, Wang Yi: Scalable Timing Analysis with Refinement. TACAS 2015:3-18
- [65] Liu Yongjun, Wei Yangjie, Wang Yi: A new 2D motion measurement method based on neighbor principal feature matching. 2015 IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems (CYBER), pages 186-190, 2015
- [66] K Lampka, J Flodin, W Yi, A Lackorzynski: Adaptive Resource Sharing in Multicores. In the proceedings of the 11th Workshop on Operating Systems Platforms for Embedded Real-Time Applications. ECRTS 2015.
- [67] Nan Guan, Mengying Zhao, Chun Jason Xue, Yongpan Liu, Wang Yi: Modular Performance Analysis of Energy-Harvesting Real-Time Networked Systems. RTSS 2015:65-74
- [68] Nan Guan, Meiling Han, Chuancai Gu, Qingxu Deng, Wang Yi: Bounding Carry-in Interference to Improve Fixed-Priority Global Multiprocessor Scheduling Analysis. RTCSA 2015:11-20

- [69] Nan Guan<sup>1</sup>, Yue Tang, Yang Wang and Wang Yi: Delay Analysis of Structural Real-Time Workload. DATE 2015.
- [70] Nan Guan, Chuan Gu, Martin Stigge, Qingxu Deng, Wang Yi: Approximate Response Time Analysis of Real-Time Task Graphs. Real-Time Systems Symposium (RTSS), 2014 IEEE, 304-313 (2014)
- [71] Martin Stigge, Nan Guan, Wang Yi: Refinement-based Exact Response-Time Analysis. ECRTS 2014, 143-152 (2014)
- [72] Youcheng Sun, Giuseppe Lipari, Nan Guan, Wang Yi: Improving the response time analysis of global fixed-priority multiprocessor scheduling. Proc. of the 20th IEEE Conference on Embedded and Real-Time Computing Systems and Applications, 2014.
- [73] Jonas Flodin, Kai Lampka, Wang Yi: Dynamic budgeting for settling DRAM contention of co-running hard and soft real-time tasks. SIES 2014. The 9th IEEE International Symposium on Industrial Embedded Systems, 2014.
- [74] Tianyu Zhang, Nan Guan, Qingxu Deng, Wang Yi: On the analysis of EDF-VD scheduled mixed-criticality real-time systems. SIES 2014. The 9th IEEE International Symposium on Industrial Embedded Systems, 2014.
- [75] Yin Bi, Wenyao Xu, Nan Guan, Yangjie Wei, Wang Yi: Pervasive eating habits monitoring and recognition through a wearable acoustic sensor. Proceedings of the 8th International Conference on Pervasive Computing Technologies for Healthcare. pages 174-177, 2014
- [76] Wei Jing, Nan Guan, Wang Yi: Performance isolation for real-time systems with Xen hypervisor on multi-cores. RTCSA 2014:1-7
- [77] Yi Zhang, Nan Guan and Wang Yi: Understanding the Dynamic Caches on Intel Processors: Methods and Applications. Proc. of the 12th IEEE International Conference on Embedded and Ubiquitous Computing (EUC), 2014.
- [78] Chuanwen Li, Yu Gu, Jianzhong Qi, Ge Yu, Rui Zhang, Wang Yi: Processing Moving kNN Queries Using Influential Neighbor Sets. PVLDB 8(2):113-124 (2014)
- [79] Nan Guan, Wang Yi: General and efficient response time analysis for EDF scheduling. DATE 2014.
- [80] Chuancai Gu, Nan Guan, Qingxu Deng, Wang Yi: Partitioned mixed-criticality scheduling on multi-processor platforms. DATE 2014.
- [81] Nan Guan, Xinping Yang, Mingsong Lv, Wang Yi: FIFO cache analysis for WCET estimation: a quantitative approach. DATE 2013: 296-301 (Best Paper Award)
- [82] Chuancai Gu, Nan Guan, Qingxu Deng, Wang Yi: Improving OCBP-based scheduling for mixed-criticality sporadic task systems. RTCSA 2013: 247-256
- [83] Nan Guan, Wang Yi: Finitary Real-Time Calculus: Efficient Performance Analysis of Distributed Embedded Systems. RTSS 2013: 330-339
- [84] Martin Stigge, Wang Yi: Combinatorial Abstraction Refinement for Feasibility Analysis. RTSS 2013: 340-349
- [85] Alexandre David, Gerd Behrmann, Peter Bulychev, Joakim Byg, Thomas Chatain, Kim G Larsen, Paul Pettersson, Jacob Illum Rasmussen, Jiri Srba, Wang Yi, Kenneth Y Joergensen, Didier Lime, Morgan Magnin, Olivier H Roux, Louis-Marie Traonouez: Tools for Model-Checking Timed Systems. In Communicating Embedded Systems: Software and Design: Formal Methods, pages 165-225, John Wiley & Sons, Inc. 2013
- [86] Martin Stigge, Wang Yi: Models for Real-Time Workload. Proceedings of a conference organized in celebration of Professor Alan Burns' sixtieth birthday, 2013

- [87] Pontus Ekberg, Wang Yi: Bounding and Shaping the Demand of Mixed-Criticality Sporadic Tasks. ECRTS 2012: 135-144 (Outstanding Paper Award)
- [88] Martin Stigge, Wang Yi: Hardness Results for Static Priority Real-Time Scheduling. ECRTS 2012: 189-198
- [89] Nan Guan, Martin Stigge, Wang Yi, Ge Yu: Parametric Utilization Bounds for Fixed-Priority Multiprocessor Scheduling. IPDPS 2012: 261-272
- [90] Nan Guan, Wang Yi: Fixed-Priority Multiprocessor Scheduling: Critical Instant, Response Time and Utilization Bound. IPDPS Workshops 2012: 2470-2473
- [91] Nan Guan, Mingsong Lv, Wang Yi, Ge Yu: WCET Analysis with MRU Caches: Challenging LRU for Predictability. IEEE Real-Time and Embedded Technology and Applications Symposium 2012: 55-64
- [92] Mingsong Lv, Nan Guan, Qingxu Deng, Ge Yu, Wang Yi: McAiT - A Timing Analyzer for Multicore Real-Time Software. ATVA 2011: 414-417
- [93] Yi Zhang, Nan Guan, Wang Yi: Towards the Implementation and Evaluation of Semi-Partitioned Multi-Core Scheduling. PPES 2011: 42-46
- [94] Fanxin Kong, Wang Yi, Qingxu Deng: Energy-efficient scheduling of real-time tasks on cluster-based multicores. DATE 2011: 1135-1140
- [95] Martin Stigge, Pontus Ekberg, Nan Guan, Wang Yi: On the Tractability of Digraph-Based Task Models. ECRTS 2011: 162-171
- [96] Nan Guan, Pontus Ekberg, Martin Stigge, Wang Yi: Resource Sharing Protocols for Real-Time Task Graph Systems. ECRTS 2011: 272-281
- [97] Martin Stigge, Pontus Ekberg, Nan Guan, Wang Yi: The Digraph Real-Time Task Model. IEEE Real-Time and Embedded Technology and Applications Symposium 2011: 71-80 (Best Paper Nomination)
- [98] Xi Jin, Nan Guan, Qingxu Deng, Wang Yi: Memory Access Aware Mapping for Networks-on-Chip. RTCSA (1) 2011: 339-348
- [99] Nan Guan, Pontus Ekberg, Martin Stigge, Wang Yi: Effective and Efficient Scheduling of Certifiable Mixed-Criticality Sporadic Task Systems. RTSS 2011: 13-23
- [100] Fanxin Kong, Nan Guan, Qingxu Deng, Wang Yi: Energy-efficient scheduling for parallel real-time tasks based on level-packing. SAC 2011: 635-640
- [101] Yi Zhang, Nan Guan, Yanbin Xiao, Wang Yi: Implementation and empirical comparison of partitioning-based multi-core scheduling. SIES 2011: 248-255
- [102] Fanxin Kong, Yiqun Wang, Qingxu Deng, Wang Yi: Minimizing Multi-resource Energy for Real-Time Systems with Discrete Operation Modes. ECRTS 2010: 113-122
- [103] Wang Yi: Multicore Embedded Systems: The Timing Problem and Possible Solutions. ICFEM 2010: 22-23
- [104] Nan Guan, Martin Stigge, Wang Yi, Ge Yu: Fixed-Priority Multiprocessor Scheduling with Liu and Layland's Utilization Bound. IEEE Real-Time and Embedded Technology and Applications Symposium 2010: 165-174 (Best Paper Nomination)
- [105] Mingsong Lv, Wang Yi, Nan Guan, Ge Yu: Combining Abstract Interpretation with Model Checking for Timing Analysis of Multicore Software. RTSS 2010: 339-349 (Best Paper Nomination)

- [106] Nan Guan, Zonghua Gu, Wang Yi, Ge Yu: Improving scalability of model-checking for minimizing buffer requirements of synchronous dataflow graphs. ASP-DAC 2009: 715-720 (Best Paper Nomination)
- [107] Mingsong Lv, Nan Guan, Yi Zhang, Rui Chen, Qingxu Deng, Ge Yu, Wang Yi: WCET Analysis of the mC/OS-II Real-Time Kernel. CSE (2) 2009: 270-276
- [108] Nan Guan, Martin Stigge, Wang Yi, Ge Yu: Cache-aware scheduling and analysis for multicores. EMSOFT 2009: 245-254
- [109] Frank S. de Boer, Immo Grabe, Mohammad Mahdi Jaghoori, Andries Stam, Wang Yi: Modeling and Analysis of Thread-Pools in an Industrial Communication Platform. ICFEM 2009: 367-386
- [110] Nan Guan, Martin Stigge, Wang Yi, Ge Yu: New Response Time Bounds for Fixed Priority Multiprocessor Scheduling. RTSS 2009: 387-397 (Best Paper Award)
- [111] Parosh Aziz Abdulla, Pavel Krcl, Wang Yi: R-Automata. CONCUR 2008: 67-81
- [112] Simon Tschirner, Liang Xuedong, Wang Yi: Model-based validation of QoS properties of biomedical sensor networks. EMSOFT 2008: 69-78
- [113] Bengt Jonsson, Simon Perathoner, Lothar Thiele, Wang Yi: Cyclic dependencies in modular performance analysis. EMSOFT 2008: 179-188
- [114] Nan Guan, Wang Yi, Zonghua Gu, Qingxu Deng, Ge Yu: New Schedulability Test Conditions for Non-preemptive Scheduling on Multiprocessor Platforms. RTSS 2008: 137-146
- [115] Pavel Krcl, Martin Stigge, Wang Yi: Multi-processor Schedulability Analysis of Preemptive Real-Time Tasks with Variable Execution Times. FORMATS 2007: 274-289
- [116] Parosh Aziz Abdulla, Pavel Krcl, Wang Yi: Sampled Universality of Timed Automata. FoSSaCS 2007: 2-16
- [117] Pavel Krcl, Wang Yi: Communicating Timed Automata: The More Synchronous, the More Difficult to Verify. CAV 2006: 249-262
- [118] Geguang Pu, Chong Zhang, Zongyan Qiu, Jifeng He, Wang Yi: Integrating Timed Automata into Tabu Algorithm for HW-SW Partitioning. ICECCS 2006: 131-138
- [119] Gerd Behrmann, Alexandre David, Kim Guldstrand Larsen, John Hkansson, Paul Pettersson, Wang Yi, Martijn Hendriks: UPPAAL 4.0. QEST 2006: 125-126
- [120] Pavel Krcl, Leonid Mokrushin, P. S. Thiagarajan, Wang Yi: Timed vs. Time-Triggered Automata. CONCUR 2004:340-354
- [121] Jin Song Dong, Ping Hao, Shengchao Qin, Jun Sun, Wang Yi: Timed Patterns: TCOZ to Timed Automata. ICFEM 2004:483-498
- [122] Geguang Pu, Dang Van Hung, Jifeng He, Wang Yi: An Optimal Approach to Hardware/Software Partitioning for Synchronous Model. IFM 2004:363-381
- [123] Geguang Pu, Xiangpeng Zhao, Shuling Wang, Zongyan Qiu, Jifeng He, Wang Yi: An Approach to Hardware/Software Partitioning for Multiple Hardware Devices Model. SEFM 2004:376-385
- [124] Pavel Krcl, Wang Yi: Decidable and Undecidable Problems in Schedulability Analysis Using Timed Automata. TACAS 2004:236-250
- [125] Tobias Amnell, Elena Fersman, Leonid Mokrushin, Paul Pettersson, Wang Yi: TIMES: A Tool for Schedulability Analysis and Code Generation of Real-Time Systems. FORMATS 2003:60-72

- [126] Johan Bengtsson, Wang Yi: On Clock Difference Constraints and Termination in Reachability Analysis of Timed Automata. *ICFEM 2003*:491-503
- [127] Johan Bengtsson, Wang Yi: Timed Automata: Semantics, Algorithms and Tools. *Lectures on Concurrency and Petri Nets 2003*:87-124
- [128] Alexandre David, Gerd Behrmann, Kim Guldstrand Larsen, Wang Yi: Unification & Sharing in Timed Automata Verification. *SPIN 2003*:225-229
- [129] Elena Fersman, Leonid Mokrushin, Paul Pettersson, Wang Yi: Schedulability Analysis Using Two Clocks. *TACAS 2003*:224-239
- [130] Alexandre David, Gerd Behrmann, Kim Guldstrand Larsen, Wang Yi: A Tool Architecture for the Next Generation of Uppaal. *10th Anniversary Colloquium of UNU/IIST 2002*:352-366
- [131] Alexandre David, M. Oliver Miller, Wang Yi: Formal Verification of UML Statecharts with Real-Time Extensions. *FASE 2002*:218-232
- [132] Gerd Behrmann, Johan Bengtsson, Alexandre David, Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: UPPAAL Implementation Secrets. *FTRTFT 2002*:3-22
- [133] Elena Fersman, Paul Pettersson, Wang Yi: Timed Automata with Asynchronous Processes: Schedulability and Decidability. *TACAS 2002*:67-82
- [134] Tobias Amnell, Elena Fersman, Leonid Mokrushin, Paul Pettersson, Wang Yi: TIMES - A Tool for Modelling and Implementation of Embedded Systems. *TACAS 2002*:460-464
- [135] Alexandre David, Wang Yi: Modelling and analysis of a commercial field bus protocol. *ECRTS 2000*:165-172
- [136] Huimin Lin, Wang Yi: A Complete Axiomatisation for Timed Automata. *FSTTCS 2000*:277-289
- [137] Huimin Lin, Wang Yi: A Proof System for Timed Automata. *FoSSaCS 2000*:208-222
- [138] Tobias Amnell, Alexandre David, Wang Yi: A Real-Time Animator for Hybrid Systems. *LCTES 2000*:134-145
- [139] Tobias Amnell, Gerd Behrmann, Johan Bengtsson, Pedro R. D'Argenio, Alexandre David, Ansgar Fehnker, Thomas Hune, Bertrand Jeannot, Kim Guldstrand Larsen, M. Oliver Miller, Paul Pettersson, Carsten Weise, Wang Yi: UPPAAL - Now, Next, and Future. *MOVEP 2000*:99-124
- [140] Anders Wall, Kristian Sandstrm, Jukka Mki-Turja, Christer Norstrm, Wang Yi: Verifying temporal constraints on data in multi-rate transactions using timed automata. *RTCSA 2000*:263-270
- [141] Fredrik Larsson, Paul Pettersson, Wang Yi: On Memory-Block Traversal Problems in Model-Checking Timed-Systems. *TACAS 2000*:127-141
- [142] Bengt Jonsson, Wang Yi: Fully Abstract Characterization of Probabilistic May Testing. *ARTS 1999*:1-18
- [143] Gerd Behrmann, Kim Guldstrand Larsen, Justin Pearson, Carsten Weise, Wang Yi: Efficient Timed Reachability Analysis Using Clock Difference Diagrams. *CAV 1999*:341-353
- [144] Christer Norstrm, Anders Wall, Wang Yi: Timed Automata as Task Models for Event-Driven Systems. *RTCSA 1999*:182-189
- [145] Johan Bengtsson, Bengt Jonsson, Johan Lilius, Wang Yi: Partial Order Reductions for Timed Systems. *CONCUR 1998*:485-500
- [146] Magnus Lindahl, Paul Pettersson, Wang Yi: Formal Design and Analysis of a Gear Controller. *TACAS 1998*:281-297

- [147] Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: UPPAAL: Status & Developments. CAV 1997:456-459
- [148] Kim Guldstrand Larsen, Fredrik Larsson, Paul Pettersson, Wang Yi: Efficient verification of real-time systems: compact data structure and state-space reduction. RTSS 1997:14-24
- [149] Kre J. Kristoffersen, Francois Laroussinie, Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: A Compositional Proof of a Real-Time Mutual Exclusion Protocol. TAPSOFT 1997:565-579
- [150] Johan Bengtsson, W. O. David Griffioen, Kre J. Kristoffersen, Kim Guldstrand Larsen, Fredrik Larsson, Paul Pettersson, Wang Yi: Verification of an Audio Protocol with Bus Collision Using UPPAAL. CAV 1996:244-256
- [151] Johan Bengtsson, Kim Guldstrand Larsen, Fredrik Larsson, Paul Pettersson, Wang Yi: UPPAAL in 1995. TACAS 1996:431-434
- [152] Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: Model-Checking for Real-Time Systems. FCT 1995:62-88
- [153] Johan Bengtsson, Kim Guldstrand Larsen, Fredrik Larsson, Paul Pettersson, Wang Yi: UPPAAL - a Tool Suite for Automatic Verification of Real-Time Systems. Hybrid Systems 1995:232-243
- [154] Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: Diagnostic Model-Checking for Real-Time Systems. Hybrid Systems 1995:575-586
- [155] Bengt Jonsson, Wang Yi: Compositional Testing Preorders for Probabilistic Processes LICS 1995:431-441
- [156] Kim Guldstrand Larsen, Paul Pettersson, Wang Yi: Compositional and Symbolic Model-Checking of Real-Time Systems. RTSS 1995:76-87
- [157] Wang Yi, Paul Pettersson, Mats Daniels: Automatic verification of real-time communicating systems by constraint-solving. FORTE 1994:243-258
- [158] Wang Yi, Bengt Jonsson: Decidability of Timed Language-Inclusion for Networks of Real-Time Communicating Sequential Processes. FSTTCS 1994:243-255
- [159] Bengt Jonsson, Chris Ho-Stuart, Wang Yi: Testing and Refinement for Nondeterministic and Probabilistic Processes. FTRTFT 1994:418-430
- [160] Wang Yi: Algebraic Reasoning for Real-Time Probabilistic Processes with Uncertain Information. FTRTFT 1994:680-693
- [161] Kim Guldstrand Larsen, Wang Yi: Time Abstracted Bisimulation: Implicit Specifications and Decidability. MFPS 1993:160-176
- [162] Wang Yi, Kim Guldstrand Larsen: Testing Probabilistic and Nondeterministic Processes. PSTV 1992:47-61
- [163] Uno Holmer, Kim Guldstrand Larsen, Wang Yi: Deciding Properties of Regular Real Time Processes. CAV 1991:443-453
- [164] Wang Yi: CCS + Time = An Interleaving Model for Real Time Systems. ICALP 1991:217-228
- [165] Wang Yi: Real-Time Behaviour of Asynchronous Agents. CONCUR 1990:502-520

#### **Edited Books**

- [1] Xuandong Li, Zhiming Liu and Wang Yi: Dependable Software Engineering: Theories, Tools, and Applications. Springer, 2015. ISBN 9783319259420.

- [2] Heiko Falk, Wang Yi (Eds.): *Proceedings of SIGPLAN/SIGBED Conference on Languages, Compilers and Tools for Embedded Systems*. LCTES 2012, Beijing, China - June 12 - 13, 2012. ACM 2012, ISBN 978-1-4503-1212-7
- [3] Karl Henrik Johansson, Wang Yi (Eds.): *Proceedings of the 13th ACM International Conference on Hybrid Systems: Computation and Control*, HSCC 2010, Stockholm, Sweden, April 12-15, 2010. ACM 2010, ISBN 978-1-60558-955-8
- [4] Sang Lyul Min, Wang Yi (Eds.): *Proceedings of the 6th ACM and IEEE International conference on Embedded software*. EMSOFT 2006, October 22-25, 2006, Seoul, Korea. ACM 2006, ISBN 1-59593-542-8
- [5] Paul Pettersson, Wang Yi: *Proceedings of The 3rd International Conference on Formal Modeling and Analysis of Timed Systems*. FORMATS 2005, Uppsala, Sweden. LNCS 3829, Springer 2005, ISBN 3-540-30946-2
- [6] Tiziana Margaria, Wang Yi: *Proceedings of the 7th International Conference on Tools and Algorithms for the Construction and Analysis of Systems*. TACAS 2001, Held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2001 Genova, Italy. LNCS 2031, Springer 2001, ISBN 3-540-41865-2