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List of Publications

Peer-reviewed conference and journal articles

42. R. Mader, L. Bara, **S. Resmerita**, A. Poelzleitner, and W. Pree
Data Consistency Testing in Automotive Multi-Core Applications - towards systematic requirement elicitation
The 10th European Congress on Embedded Real-Time Systems, Toulouse, France, January 2020
41. **S. Resmerita**, A. Poelzleitner, and S. Lukesch
Modeling and Simulation of Software Execution Time in Embedded Systems
Proceedings of the 10th Annual Computing and Communication Workshop and Conference (IEEE CCWC2020), Las Vegas, USA, January 2020
40. A. Naderlinger, **S. Resmerita**, and W. Pree
LET for Legacy and Model-based Applications
In R. Ernst, S. Kuntz, S. Quinton, and M. Simons, editors, *The Logical Execution Time Paradigm: New Perspectives for Multicore Systems*, volume 8, pages 135–138. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, Dagstuhl, Germany, 2018
39. **S. Resmerita**, A. Naderlinger, and S. Lukesch.
Efficient realization of logical execution times in legacy embedded software
Proceedings of the 15th ACM-IEEE International Conference on Formal Methods and Models for System Design, MEMOCODE 2017, Vienna, Austria, pp.36–45, 2017.
38. J. Henning, H.V. Hasseln, H. Mohammad, **S. Resmerita**, S.Lukesch, and A. Naderlinger
Towards Parallelizing Legacy Embedded Control Software Using the LET Programming Paradigm
WiP session of the 22nd IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS 2016), Vienna, Austria, April 2016.
37. **S. Resmerita**, A. Naderlinger, M. Huber, K. Butts, and W. Pree
Applying Real-time Programming to Legacy Embedded Control Software
Proceedings of the 18th IEEE Symposium on Real-Time Computing (ISORC 2015), Auckland, New Zealand, April 2015.
Available at <https://myfiles.sbg.ac.at/index.php/s/7o1OijF3mzZkFM1>
36. **S. Resmerita**, A. Poelzleitner, and S. Lukesch
Addressing Non-functional Requirements for Embedded Applications with Platform Based Aspect Design
Proceedings of the 11th Intl IEEE/IFIP Workshop on Software Technologies for Future Embedded and Ubiquitous Systems (SEUS 2015), Auckland, New Zealand, April 2015.
Available at <https://myfiles.sbg.ac.at/index.php/s/T2CdpCs7b9mSv7v>

35. P. Hintenaus and **S. Resmerita**
Bringing Computer Science Students Closer to Cyber-Physical Systems Design
Proceedings of the First Workshop on Cyber-Physical Systems Education (CPS-Ed 2013) at Cyber Physical Systems Week (CPSWeek 2013), Philadelphia, Pennsylvania, USA, April 2013.
Available at <https://myfiles.sbg.ac.at/index.php/s/szKT4MXIy9xZ5yh>
34. **S. Resmerita** and W. Pree
Verification of embedded control systems by simulation and program execution control
Proceedings of the American Control Conference (ACC), pp.3581-3586, Montréal, Canada, June 2012.
Available at <https://myfiles.sbg.ac.at/index.php/s/zSZGKryc6k9BiQS>
33. M. Broy, S. Chakraborty, D. Goswami, S. Ramesh, M. Satpathy, **S. Resmerita**, and W. Pree
Cross-layer analysis, testing and verification of automotive control software
In Proceedings of the International Conference on Embedded Software (EMSOFT 2011), Taipei, Taiwan, October 2011.
32. A. Naderlinger, J. Templ, **S. Resmerita**, and W. Pree
An Asynchronous Java Interface to MATLAB
The 4th International ICST Conference on Simulation Tools and Techniques (SIMUTools 2011), Barcelona, Spain, 2011.
31. **S. Resmerita**, K. Butts, P. Derler, A. Naderlinger, and W. Pree
Migration of legacy software towards correct-by-construction timing behavior
Foundations of computer software : modeling, development, and verification of adaptive systems, Revised selected papers from the 2010 Monterey Workshop, LNCS 6662, pp. 55-76, 2011.
Available at <https://myfiles.sbg.ac.at/index.php/s/oQeLGX2BhUgn9wz>
30. P. Derler and **S. Resmerita**
Flexible Static Scheduling of Software with Logical Execution Time Constraints
Proceedings of the 10th IEEE International Conference on Computer and Information Technology (CIT 2010), pp: 1719-1726, Bradford, UK, July 2010.
Available at <https://myfiles.sbg.ac.at/index.php/s/PQQuGq6ExJmq8sV>
29. P. Derler, A. Naderlinger, W. Pree, **S. Resmerita**, J. Templ
Simulation of LET Models in Simulink and Ptolemy
Foundations of computer software: future trends and techniques for development, Revised selected papers from the 2008 Monterey Workshop, LNCS 6028, 2010.
28. **S. Resmerita**, P. Derler, W. Pree and A. Naderlinger
Modeling and Simulation of TDL Applications
In Proceedings of the 2007 International Dagstuhl conference on Model-based engineering of embedded real-time systems (MBEERTS'07), LNCS 6100, pp 107-128, 2010.
27. **S. Resmerita** and P. Derler
Flexible Scheduling of Software with Logical Execution Time Constraints, Workshop on Reconciling Performance with Predictability (REPP'09), at the Embedded System Week in Grenoble, October 2009.
26. **S. Resmerita**, M. Heymann and G. Meyer
Towards a flexible air traffic management: dealing with conflicts
The 11th World Conference on Transport Research, UC Berkeley, June 2007.
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25. A. Ferscha and **S. Resmerita**
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elektrotechnik und informationstechnik 1-2.2007, pp. 17-25, Springer, 2007.
24. A. Ferscha, **S. Resmerita** and C. Holzmann

- Human Computer Confluence*
In "Universal Access in Ambient Intelligence Environments", LNCS 4397, pp. 14-27, 2007.
23. A. Ferscha, C. Holzmann and **S. Resmerita**
The Key Knob
In Proceedings of the 26th IEEE International Conference on Distributed Computing Systems Workshops (ICDCSW 2006), IEEE CS Press, Lisbon, Portugal, 2006.
 22. C. Holzmann, **S. Resmerita**, M. H. Leitner and A. Ferscha
A Paradigm for Orientation-Based Universal Remote Control
Proceedings of the 3rd International Workshop on the Tangible Space Initiative (TSI 2006), Dublin, Ireland, pp. 425-432, May 2006.
 21. M. Heymann, F. Lin, G. Meyer and **S. Resmerita**
Analysis of Zeno behaviors in a class of hybrid systems
IEEE Transactions on Automatic Control, Vol.50, Nr.3, March 2005.
 20. A. Ferscha, **S. Resmerita**, C. Holzmann and M. Reichoer
Orientation sensing for gesture-based interaction with smart artifacts
Computer Communications, Vol. 28, No. 13, 2005.
 19. M. Heymann, G. Meyer and **S. Resmerita**
An agent model for air traffic management - the merging traffic problem
Proceedings of the 16th IFAC Symposium on Automatic Control in Aerospace, Elsevier, St. Petersburg, Russia, June 2004.
 18. **S. Resmerita**, M. Heymann and G. Meyer
A framework for conflict resolution in air traffic management
Proceedings of the 42nd IEEE Conference on Decision and Control, pp. 2035-2040, Vol. 2, Maui, Hawaii, USA, December 2003.
 17. **S. Resmerita** and M. Heymann
Conflict Resolution in multi-agent systems
Proceedings of the 42nd IEEE Conference on Decision and Control, pp. 2537-2542, Vol. 3, Maui, Hawaii, USA, December 2003.
 16. M. Heymann, F. Lin, G. Meyer and **S. Resmerita**
Analysis of Zeno behaviors in hybrid systems
Proceedings of the 41st IEEE Conference on Decision and Control, pp. 2379-2384, Vol. 3, Las Vegas, USA, December 2002.
 15. D. Panescu, S. Dumbrava, **S. Resmerita** and A. Ninu
Some aspects on student practical activity in CIM
Proceedings of the 6th International Symposium on Automatic Control and Computer Science, pp. 160 - 165, Iasi, Romania, October 1998.
 14. **S. Resmerita**, D. Panescu, C. Hutanu and M. Postolache
A microcontroller versus microprocessor architecture for a stepper motor based robot
Proceedings of the 6th International Symposium on Automatic Control and Computer Science, pp. 140 - 143, Iasi, Romania, October 1998.
 13. M. Voicu, D. Panescu, O. Pastravanu, S. Dumbrava, S. Ifrim and **S. Resmerita**
CIM systems: a new trend in control engineering education
Proceedings of the Global Congress on Engineering Education (lead paper), pp. 337 - 341, Cracow, Poland, 1998.
 12. D. Panescu and **S. Resmerita**
On using Fuzzy Expert Systems in the cement production control
Proceedings of the 2nd International Symposium on Intelligent Manufacturing Systems, pp. 863 - 872, Sakarya, Turkey, August 1998
 11. M. Postolache, C. Hutanu, D. Panescu, **S. Resmerita** and A. Pricop
A local operating network approach for collaborative work in multi-agent systems

- Proceedings of the First International Symposium on Concurrent Enterprising, pp. 96-106, Sinaia, Romania, June 1998.
10. Gh. Baluta and **S. Resmerita**
Considerations concerning the speed control of electrical drive systems with stepping motors
Proceedings of the 4th IFAC Conference on System Structure and Control, pp. 502 - 507, Bucharest, Romania, 1997.
 9. Gh. Baluta and **S. Resmerita**
On the numerical speed control of electrical drive systems using stepping motors
Proceedings of the IEEE International Conference on Intelligent Engineering Systems , pp. 357 - 360, Budapest, Hungary, 1997.
 8. Gh. Baluta and **S. Resmerita**
Considerations concerning the open-loop control of electrical drive systems using stepper motors
Proceedings of the International Symposium on Signals, Circuits and Systems, pp. 131 - 134, Iasi, Romania, 1997.
 7. Gh. Baluta, **S. Resmerita** , M. Albu and R. Bojoi
Contribution on the numerical measurement of the characteristic quantities of electric driving systems
Proceedings of the 5th International Conference on Optimization of Electric and Electronic Equipments, Vol.5, pp. 1609 - 1618, Brasov, Romania, 1996.
 6. Gh. Baluta, R. Bojoi, M. Albu and **S. Resmerita**
+5V/5A Switching source
Proceedings of the 5th International Conference on Optimization of Electric and Electronic Equipments, Vol.2, pp. 431 - 436, Brasov, Romania, 1996.
 5. Gh. Baluta, **S. Resmerita** and C. Penelea
Stepper motor control with specialized integrated circuits
Proceedings of the 5th International Symposium on Automatic Control and Computer Science, pp. 374 - 379, Iasi, Romania, 1995.
 4. Gh. Baluta, **S. Resmerita** and V. Apopei
Contributions concerning the computer based control of stepping motor systems
Proceedings of the First IEEE International Symposium on Advanced Electromechanical Motion Control Systems, pp.124 - 129, Cluj-Napoca, Romania, 1995.

Peer-reviewed book chapters

3. **S. Resmerita**, P. Derler, and W. Pree
The Validator tool suite: filling the gap between conventional software-in-the-loop and hardware-in-the-loop simulation environments
In "Real-time Simulation Technologies: Principles, Methodologies, and Applications", Eds. K. Popovici and P. Mosterman, CRC Press, pp.199-218, 2012.
2. J. Templ, P. Derler, P. Hintenaus, A. Naderlinger, W. Pree, **S. Resmerita**
Modeling and simulation of timing behavior with the Timing Definition Language (TDL)
In "Real-time Simulation Technologies: Principles, Methodologies, and Applications", Eds. K. Popovici and P. Mosterman, CRC Press, pp.159-180, 2012.
1. A. Ferscha, C. Holzmann, M. Hechinger, B. Emsenhuber, **S. Resmerita**, S. Vogl, B. Wally
Pervasive Computing
In "Hagenberg Research". Editors: B. Buchberger, M. Affenzeller, A. Ferscha, M. Haller, T. Jebelean, E.P. Klement, P. Paule, G. Pomberger, W. Schreiner, R. Stubenrauch, R. Wagner, G. Weiss, W. Windsteiger. Springer-Verlag Berlin Heidelberg, 2009. Available at <http://www.pervasive.jku.at/Research/Publications/Documents/HagenbergResearch2.0.pdf>

Technical reports

3. **S. Resmerita**, P. Derler and E. A. Lee
Modeling and Simulation of Legacy Embedded Systems
Technical Report No. UCB/EECS-2010-38, EECS Department, UC Berkeley, April 2010.
Available at <http://www.eecs.berkeley.edu/Pubs/TechRpts/2010/EECS-2010-38.html>
2. **S. Resmerita**, P. Derler and W. Pree
Timing Definition Language (TDL) Modeling in Ptolemy II
Tech. Rep. 21, Department of Computer Science, University of Salzburg, June 2008.
Available at <http://www.softwareresearch.net/fileadmin/src/docs/publications/TR021.pdf>
1. M. Heymann, F. Lin, G. Meyer, and **S. Resmerita**
Analysis of Zeno Behaviors in Hybrid Systems
Technical Report CIS-2002-03, Computer Science Department, Technion – Israel Institute of Technology, March 2002
Available at <http://www.cs.technion.ac.il/users/wwwb/cgi-bin/tr-get.cgi/2002/CIS/CIS-2002-03.pdf>

Posters

3. J. Henning, H.V. Hasseln, H. Mohammad, **S. Resmerita**, S. Lukesch, A. Naderlinger
Towards Parallelizing Legacy Embedded Control Software Using the LET Programming Paradigm
Poster presentation at the 22nd IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS 2016), Vienna, Austria, April 2016.
2. P. Derler and **S. Resmerita**
Relaxing Scheduling Constraints for Systems with Logical Execution Time Specifications
Poster presentation at the ACM SIGPLAN/SIGBED Conference on Languages, Compilers, and Tools for Embedded Systems (LCTES), June 2009.
1. **S. Resmerita** and P. Derler
APES-LESS: Access Point Event Simulator for Legacy Embedded Software Systems
Poster presentation at the 2009 Berkeley EECS Annual Research Symposium, UC Berkeley, February 2009.