List of Publications

Peer-reviewed conference and journal articles

38. J. Henning, H.V. Hasseln, H. Mohammad, S. Resmerita, S. Lukesch, 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/7o1QjJF3mzZkFM1

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

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.
*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](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*  
Available at [https://myfiles.sbg.ac.at/index.php/s/PQQuGq6ExJmq8sV](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*  

28. **S. Resmerita**, P. Derler, W. Pree and A. Naderlinger  
*Modeling and Simulation of TDL Applications*  

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.

*Towards a flexible air traffic management: dealing with conflicts*  
The 11th World Conference on Transport Research, UC Berkeley, June 2007.  
Available at [https://myfiles.sbg.ac.at/index.php/s/XU9D3KXWRCpq9Mq](https://myfiles.sbg.ac.at/index.php/s/XU9D3KXWRCpq9Mq)

25. A. Ferscha and **S. Resmerita**  
*Gestural interaction in the pervasive computing landscape*  

24. A. Ferscha, **S. Resmerita** and C. Holzmann  
*Human Computer Confluence*  

23. A. Ferscha, C. Holzmann and **S. Resmerita**  
*The Key Knob*  

22. C. Holzmann, **S. Resmerita**, M. H. Leitner and A. Ferscha  
*A Paradigm for Orientation-Based Universal Remote Control*  

*Analysis of Zeno behaviors in a class of hybrid systems*  

20. A. Ferscha, **S. Resmerita**, C. Holzmann and M. Reichoer  
*Orientation sensing for gesture-based interaction with smart artifacts*  

*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*

17. **S. Resmerita** and M. Heymann
*Conflict Resolution in multi-agent systems*

*Analysis of Zeno behaviors in hybrid systems*

15. D. Panescu, S. Dumbrava, **S. Resmerita** and A. Ninu
*Some aspects on student practical activity in CIM*

*A microcontroller versus microprocessor architecture for a stepper motor based robot*

*CIM systems: a new trend in control engineering education*

12. D. Panescu and **S. Resmerita**
*On using Fuzzy Expert Systems in the cement production control*

11. M. Postolache, C. Hutanu, D. Panescu, **S. Resmerita** and A. Pricop
*A local operating network approach for collaborative work in multi-agent systems*

10. Gh. Baluta and **S. Resmerita**
*Considerations concerning the speed control of electrical drive systems with stepping motors*

9. Gh. Baluta and **S. Resmerita**
*On the numerical speed control of electrical drive systems using stepping motors*

8. Gh. Baluta and **S. Resmerita**
*Considerations concerning the open-loop control of electrical drive systems using stepper motors*

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

+5V/5A Switching source

5. Gh. Baluta, S. Resmerita and C. Penelea
Stepper motor control with specialized integrated circuits

4. Gh. Baluta, S. Resmerita and V. Apopei
Contributions concerning the computer based control of stepping motor systems

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

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)

Pervasive Computing

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

Analysis of Zeno Behaviors in Hybrid Systems

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
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.

2. P. Derler and S. Resmerita
   **Relaxing Scheduling Constraints for Systems with Logical Execution Time Specifications**

Poster presentation at the 22nd IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS 2016), Vienna, Austria, April 2016.