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List of Publications

International Refereed Conference/Workshop and Journal Publications

[1] Andreas Naderlinger. "Harnessing Concurrency in Synchronous Block Diagrams to Parallelize Simulation on Multi-core Hosts". In: *2019 Winter Simulation Conference, WSC 2019, Maryland, USA, December 08 - 11.* (to appear). Dec. 2019.

[2] Andreas Naderlinger and Michael Moser. "A TrueTime Extension for Instruction-level Timing and Multi-stack Support". In: *IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society, Lisbon, Portugal, October 14-17.* (to appear). Oct. 2019.

[3] Andreas Naderlinger. "Subjecting Legacy Simulink Models to Timing Specifications". In: *Cyber Physical Systems. Model-Based Design.* Ed. by Roger Chamberlain, Walid Taha, and Martin Törngren. Vol. 11615. Lecture Notes in Computer Science (LNCS). Springer Berlin Heidelberg, July 2019, pp. 51–70.

[4] Andreas Naderlinger, Stefan Resmerita, and Wolfgang Pree. "LET for Legacy and Model-based Applications". In: *The Logical Execution Time Paradigm: New Perspectives for Multicore Systems (Dagstuhl Seminar 18092).* Ed. by Rolf Ernst, Stefan Kuntz, Sophie Quinton, and Martin Simons. Vol. 8. 2. Dagstuhl, Germany: Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2018, pp. 135–138.

[5] Andreas Naderlinger. "Simulating Execution-Time Variations in MATLAB/ Simulink". In: *2017 Winter Simulation Conference, WSC 2017, Las Vegas, NV, USA, December 3-6, 2017.* 2017, pp. 1491–1502.

[6] Stefan Resmerita, Andreas Naderlinger, and Stefan Lukesch. "Efficient realization of logical execution times in legacy embedded software". In: *Proceedings of the 15th ACM-IEEE International Conference on Formal Methods and Models for System Design, MEMOCODE 2017, Vienna, Austria, September 29 - October 02.* 2017, pp. 36–45.

[7] Andreas Naderlinger. "Simulating preemptive scheduling with timing-aware blocks in Simulink". In: *Design, Automation & Test in Europe Conference & Exhibition, DATE 2017, Lausanne, Switzerland, March 27-31, 2017.* 2017, pp. 758–763.

[8] Julien Hennig, Hermann von Hasseln, Hassan Mohammad, Stefan Resmerita, Stefan Lukesch, and Andreas Naderlinger. "Towards Parallelizing Legacy Embedded Control Software Using the LET Programming Paradigm". In: *Work-in-Progress and Demo Proceedings - 2016 IEEE Real-Time and Embedded Technology and Applications Symposium (RTAS).* Vol. WIP. Vienna, Austria, Apr. 2016.

[9] Stefan Resmerita, Andreas Naderlinger, Manuel Huber, Kenneth Butts, and Wolfgang Pree. "Applying Real-Time Programming to Legacy Embedded Control Software". In: *2015 IEEE 18th International Symposium on Real-Time Distributed Computing (ISORC).* Apr. 2015, pp. 1–8.

[10] Andreas Naderlinger. "Multiple Real-Time Semantics on top of Synchronous Block Diagrams". In: *Proceedings of the 2013 Symposium on Theory of Modeling and Simulation - DEVS Integrative M&S Symposium*. TMS/DEVS '13. San Diego, CA, USA: Society for Computer Simulation International, 2013.

[11] Andreas Naderlinger. "Execution-time Aware Simulink Blocks". In: *Proceedings of the 2012 SpringSim Poster & Work-In-Progress Track*. SpringSim '12. Orlando, Florida: Society for Computer Simulation International, 2012, 3:1–3:2.

[12] Stefan Resmerita, Andreas Naderlinger, Wolfgang Pree, and Patricia Derler. "Bridging the Gap between Classical Extra-functional Properties of Legacy Embedded Software and Modern Requirements addressed by Model-Based Design". In: *First International Workshop on Model-Based Design with a Focus on Extra-Functional Properties (MB-DEFP)*. Oct. 2011.

[13] Stefan Resmerita, Kenneth Butts, Patricia Derler, Andreas Naderlinger, and Wolfgang Pree. "Migration of Legacy Software towards Correct-by-Construction Timing Behavior". In: *Foundations of Computer Software. Modeling, Development, and Verification of Adaptive Systems*. Ed. by Radu Calinescu and Ethan Jackson. Vol. 6662. Lecture Notes in Computer Science (LNCS). Springer Berlin Heidelberg, Mar. 2011, pp. 55–76. ISBN: 978-3-642-21291-8.

[14] Andreas Naderlinger, Josef Templ, Stefan Resmerita, and Wolfgang Pree. "An Asynchronous Java Interface to MATLAB". In: *Proceedings of the 4th International ICST Conference on Simulation Tools and Techniques*. SIMUTools '11. Barcelona, Spain: ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering), 2011, pp. 57–62. ISBN: 978-1-936968-00-8.

[15] Wolfgang Pree, Josef Templ, Peter Hintenaus, Andreas Naderlinger, and Johannes Pletzer. "TDL - Steps Beyond Giotto: A Case for Automated Software Construction." In: *Int. J. Software and Informatics* 5.1-2 (2011), pp. 335–354.

[16] Stefan Resmerita, Patricia Derler, Wolfgang Pree, and Andreas Naderlinger. "Modeling and Simulation of TDL Applications". In: *Model-Based Engineering of Embedded Real-Time Systems*. Ed. by Holger Giese, Gabor Karsai, Edward Lee, Bernhard Rumpe, and Bernhard Schätz. Vol. 6100. Lecture Notes in Computer Science (LNCS). Springer Berlin Heidelberg, 2011, pp. 107–128. ISBN: 978-3-642-16276-3.

[17] Patricia Derler, Andreas Naderlinger, Wolfgang Pree, Stefan Resmerita, and Josef Templ. "Simulation of LET Models in Simulink and Ptolemy". In: *Foundations of Computer Software. Future Trends and Techniques for Development*. Ed. by Christine Choppy and Oleg Sokolsky. Vol. 6028. Lecture Notes in Computer Science (LNCS). Springer Berlin Heidelberg, 2010, pp. 83–92. ISBN: 978-3-642-12565-2.

[18] Andreas Naderlinger, Wolfgang Pree, and Josef Templ. "Visual Modeling of Real-Time Behavior". In: *Proceedings of Symposium on Automotive/Avionics Systems Engineering (SAASE 2009)*. Oct. 2009.

[19] Andreas Naderlinger, Josef Templ, and Wolfgang Pree. "Simulating Real-time Software Components based on Logical Execution Time". In: *Proceedings of the 2009 Summer Computer Simulation Conference*. SCSC '09. Istanbul, Turkey: Society for Modeling & Simulation International, 2009, pp. 148–155.

[20] Josef Templ, Johannes Pletzer, Wolfgang Pree, Peter Hintenaus, and Andreas Naderlinger. "Extending a Time-Triggered System by Event-Triggered Activities". In: *International Journal on Advances in Software* 2.4 (2009), pp. 313–322. ISSN: 1942-2628.

[21] Andreas Naderlinger and Josef Templ. "A Framework for Command Processing in Java/Swing Programs based on the MVC Pattern". In: *Proceedings of the 6th international symposium on Principles and practice of programming in Java*. PPPJ '08. Modena, Italy: ACM, 2008, pp. 35–42. ISBN: 978-1-60558-223-8.

[22] Andreas Naderlinger, Johannes Pletzer, Wolfgang Pree, and Josef Templ. "Model-Driven Development of FlexRay-Based Systems with the Timing Definition Language (TDL)". In: *Software Engineering for Automotive Systems, 2007. ICSE Workshops SEAS '07. Fourth International Workshop on*. Washington, DC, USA: IEEE Computer Society, 2007, pp. 6–11. ISBN: 0-7695-2830-9.

International Refereed Book Chapters

[23] Josef Templ, Andreas Naderlinger, Patricia Derler, Peter Hintenaus, Wolfgang Pree, and Stefan Resmerita. "Real-Time Simulation Technologies - Principles, Methodologies, and Applications". In: CRC Press, 2012. Chap. Modeling and Simulation of Timing Behavior with the Timing Definition Language (TDL). ISBN: 978-1-4398-4665-0, 978-1-4398-4723-7.

[24] Andreas Naderlinger, Josef Templ, and Wolfgang Pree. "Java in Academia and Research". In: ed. by Ke Cai. Paramount, CA: CreateSpace, 2011. Chap. Command Processing in Java Swing Programs. ISBN: 1463789459, 9781463789459.

Patents

[25] Andreas Naderlinger. *Simulating Execution-Time Variations and Scheduling in A Block-Oriented Simulation System*. application number: EP17156947; filed February 2017; Patent pending. 2017.

[26] Wolfgang Pree, Andreas Naderlinger, and Josef Templ. *Simulating real-time software components based on logical execution time*. US Patent 8,543,366. Sept. 2013.

[27] Andreas Naderlinger, Wolfgang Pree, and Josef Templ. *Simulation von Echtzeit-Software-Komponenten auf Basis der Logischen Ausführungszeit*. DE Patent 102,009,027,627. Mar. 2011.

Theses

[28] Andreas Naderlinger. "Modeling of Real-Time Software Systems based on Logical Execution Time". PhD thesis. University of Salzburg, 2009.

[29] Andreas Naderlinger. "A Plug-In Architecture for Platform-Specific Code Generation from TDL Components". MA thesis. University of Salzburg, 2005.

Other Formats

[30] Josef Templ, Johannes Pletzer, and Andreas Naderlinger. *Extending TDL with Asychronous Activities*. Tech. rep. `http://www.softwareresearch.net`. University of Salzburg, 2008.

[31] Andreas Naderlinger. *A survey of dynamic thermal management and power consumption estimation*. Software System Seminar, University of Salzburg. 2007.