

Day 1 - Tuesday, May 17, 2022

Room Beta, U Building of MDU
All times in CEST

8:30 - 9:30	Registration
9:30 - 9:40	Welcome and Message from General Chairs
9:40 - 9:45	Message from Technical Program Chairs
9:45 - 10:00	Welcome message from Vice Chancellor, Mälardalen University
10:05 - 11:00	Keynote 1 Session Chair: Uwe Brinkschulte & Saad Mubeen <div> A look into the future: AI and 6G Aneta Vulgarakis (Senior Research Manager in Artificial Intelligence, Ericsson Sweden) </div>
11:00 - 11:30	Coffee/Tea Break
11:30 - 12:30	Session 1 Organic Computing and Self Organization Session Chair: Nan Guan <div> Improving an Artificial Hormone System's Time Bounds Using Task Allocation Signals Eric Hutter (Goethe University Frankfurt) Robin Lakos (Goethe University Frankfurt) Uwe Brinkschulte (Goethe University Frankfurt) </div> <div> Evaluation of Conditional Tasks in an Artificial DNA System Philipp Homann (Goethe-Universität Frankfurt am Main) Mathias Pacher (Goethe-Universität Frankfurt am Main) Uwe Brinkschulte (Goethe-Universität Frankfurt am Main) </div>
12:30 - 13:30	Lunch at Restaurant Rosenhill (U Building of MDU)
13:30 - 15:00	Session 2 Memory Contention Session Chair: Christian Dietrich <div> Assessing Intel's memory bandwidth allocation for resource limitation in real-time systems Giorgio Farina (Federico II, University of Naples) Marcello Cinque (Federico II, University of Naples) Gautam Gala (TUK, Technical University of Kaiserslautern) Gerhard Fohler (TUK, Technical University of Kaiserslautern) </div> <div> Using Reservoir Sampling and Parallelization to Improve Dynamic Binary Instrumentation Brandon Upp (Indiana University Purdue University Indianapolis) Sai Pavan Kumar Meruga (Indiana University Purdue University Indianapolis) James Hill (Indiana University Purdue University Indianapolis) </div> <div> Denial-of-Service Attacks on Shared Resources in Intel's Integrated CPU-GPU Platforms Michael Bechtel (University of Kansas) Heechul Yun (The University of Kansas) </div>
15:00 - 15:30	Coffee/Tea Break
15:30 - 16:30	Session 3 Machine Learning for Embedded Systems Session Chair: Masoud Daneshtalab <div> LRP-based Policy Pruning and Distillation of Reinforcement Learning Agents for Embedded Systems Rui Xu (Nanjing University of Science and Technology) Siyu Luan (Umea University) Zonghua Gu (Umea University) Qingling Zhao (Nanjing University of Science and Technology) </div> <div> CLAIRE: Enabling Continual Learning for Real-time Autonomous Driving with a Dual-head Architecture Hao Zhang (North Carolina State University) Frank Mueller (North Carolina State University) </div>
18:00 - 22:00	Reception

Day 2 - Wednesday, May 18, 2022

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9:30 - 10:30	Coffee/Tea, Mingle and Registration
10:30 - 12:00	Session 4 Scheduling and Message Passing Session Chair: Inés Alvarez Vadillo <div> Differentiating Network Flows for Priority-Aware Scheduling of Incoming Packets in Real-Time IoT Systems Christoph Blumschein (TU Berlin) Ilija Behnke (TU Berlin) Lauritz Thamsen (University of Glasgow) Odej Kao (TU Berlin) </div> <div> Utilising Kronecker Algebra to Detect Unexpected Behaviour in Distributed Systems Patrick Denzler (Vienna University of Technology) Johann Blieberger (Vienna University of Technology) Wolfgang Kastner (Vienna University of Technology) </div> <div> Security-Cognizant Real-Time Scheduling Sanjoy Baruah (Washington University in St. Louis) </div>
12:00 - 13:30	Lunch at Restaurant Rosenhill (U Building of MDU)
13:30 - 14:30	Session 5 Outstanding Papers Session Chair: Mohammad Ashjaei <div> PSIC: Priority-Strict Multi-Core IRQ Processing Malte Bargholz (Leibniz University Hanover) Christian Dietrich (Technische Universität Hamburg) Daniel Lohmann (Leibniz University Hanover) </div> <div> Optimal Order Assignment Algorithms for Single-Rate Time-Driven AFAP Cyclic Executives Reinder J. Bril (Eindhoven University of Technology (TU/e)) </div>
14:30 - 15:00	Coffee/Tea Break
15:00 - 16:00	Keynote 2 Session Chairs: Mikael Sjödin & Uwe Brinkschulte <div> Time and Space Partitioning on Multicore+Accelerator Platforms James Anderson (W.R. Kenan Distinguished Professor, University of North Carolina at Chapel Hill) </div>
16:00 - 17:00	Awards and Closing Remarks
18:30 - 22:00	Banquet