



RTNS 26

34th International Conference on Real-Time Networks & Systems Wednesday, November 4th

08:15–09:00	Registration & Welcome Desk
09:00–09:30	Opening Session
09:30–10:30	Keynote – Sergei Chichin (Airbus) From Training to Flight: The Industrial Realities of Embedded AI in Avionics
10:30–11:00	Coffee Break
11:00–12:15	Session 1 – AI Acceleration and Timing Prediction
11:00–11:25	Hard and Soft Real-Time DNN Inference Scheduling on Heterogeneous Multi-Accelerator Systems via Reinforcement Learning F. Blanco, E. Russo, G. Ascia, D. Patti, M. Palesi
11:25–11:50	Using CUDA Green Contexts for Dynamic GPU Partitioning H. Zahaf, P. Hladik, A. Queudet, A. Benhariga
11:50–12:15	From Robustness to Worst-Case Timing Analysis: Reusing Neural Network Abstract Interpretation with DeepWCET T. Häberlein, D. Penk, D. Riedelbauch, I. Stilkerich, P. Wägemann
12:20–14:00	Lunch Break
14:00–14:50	Session 2 – Real-Time Software: Design, Analysis, and Deployment – Part 1
14:00–14:25	A Bi-Class Task Model and Reservation Sizing Method for Containerized Linux-based Space Applications M. Kooshmanian, J. Ermont, S. Corbin, L. Miné, F. Boniol
14:25–14:50	Performance-Aware Deployment of Real-Time Containers in Distributed Embedded Systems M. Waqas, P. Strandberg, J. Åkesson, S. Mubeen, M. Ashjaei
14:50–15:10	JRWRTC – Junior Researcher Workshop: Short Presentations TBA
15:10–15:45	Coffee Break & JRWRTC Poster Session
15:45–17:00	Session 2 – Real-Time Software: Design, Analysis, and Deployment – Part 2
15:45–16:10	A Formal Specification Framework for System Software D. Nagarajan, M. Baunach, T. Scheipel
16:10–16:35	Rust for Real: A Performance and WCET Comparison of Rust and C for Real-Time Systems J. Kühbacher, D. Heim, S. Altmeyer
16:35–17:00	Reflex: Argument-Aware Bytecode Fingerprints for Cold-Start Execution-Time Prediction in Soft Real-Time Edge Offloading K. Müller, N. Franchi
18:30	Welcome Cocktail Reception – Capitole



RTNS 26

34th International Conference on Real-Time Networks & Systems Thursday, November 5th

09:00–10:00	Keynote – Alessandro Papadopoulos (DTU / Mälardalen University) Predictability in the Edge-to-Cloud Continuum: When Time Matters
10:00–10:30	Coffee Break
10:30–12:10	Session 3 – Scheduling and Resource Management
10:30–10:55	Response Times Analysis in a Two-Level Hierarchical System with Static Multi-Access L. Deschermes, H. Bauer, F. Ridouard, A. Choquet-Geniet
10:55–11:20	ReBoT-MiCS: Reliability-Aware Bounding Time for Enhancing Timing Behavior of Embedded Mixed-Criticality Systems M. Abbasinia, B. Ranjbar, A. Kumar
11:20–11:45	Single-Resource Critical-Section Granularity in a Mixed-Criticality System with the PCP-A F. Suarez, D. Stephens, S. Galvan, C. Nemitz
11:45–12:10	Awkernel: RTOS Bridging DAG Scheduling Theory and Component-Oriented Real-Time Systems Practice A. Yano, R. Nishimura, Y. Kobayashi, Y. Takano, T. Ishikawa-Aso, T. Azumi
12:10–13:45	Lunch Break
13:45–15:25	Session 4 – Timing Analysis, Verification, and Architectures
13:45–14:10	Formal Modeling of Multi-Core Systems to Investigate Causality in Timing Anomalies M. Essabyr, F. Brandner, M. Asavoa, S. Faucou, J. Béchenec
14:10–14:35	SchedFuzz: Theory-Based Semantic Oracles for Fuzzing Real-Time Schedulers W. Qiu, T. He, B. Ward
14:35–15:00	From Threads to Fresh Frames: Cross-Layer Modeling and Scheduling of RealSense on Linux Y. Shen, C. Scholz, B. Vanderborght, W. Joosen, A. Paolillo
15:00–15:25	On the difficulty of reducing worst-case latency through header-only deflection in routerless on-chip networks L. Soares Indrusiak
15:25–15:45	Coffee Break
15:45–17:25	Session 5 – Network Calculus and Distributed Timing
15:45–16:10	Maxwait: A Generalized Mechanism for Distributed Time-Sensitive Systems F. Paladino, S. Li, E. Lee
16:10–16:35	Algebraic simulation with Network Calculus using the notion of capacity function D. Guidolin-Pina, M. Boyer, T. Moreau
16:35–17:00	Forward end-to-end delay Analysis and Network Calculus: a formal equivalence under FIFO and FP/FIFO scheduling D. Guidolin-Pina, F. Ridouard, H. Bauer, A. Soni
17:00–17:25	On the Safety of Network Calculus Models for Bounding Latency in Priority-preemptive Wormhole Networks Y. Zhu, L. Indrusiak, R. Zippo, G. Stea, M. Andreozzi
18:15	Tour – Muséum de Toulouse Museum is approximately 20 minutes from the conference venue
Afterwards	RTNS Gala Dinner – Muséum de Toulouse



RTNS 26

34th International Conference on Real-Time Networks & Systems Friday, November 6th

10:00–11:00 **Keynote – Ahlem Mifdaoui (University of Toulouse / ISAE-SUPAERO)**

A Journey Towards Predictable Networked Systems: From Isolated Determinism to End-to-End Convergence

11:00–11:20 Coffee Break

11:20–13:00 **Session 6 – Time-Sensitive and Networked Systems**

11:20–11:45 **HELEN: A new EDF-based Heuristic Scheduler for Extra-Large TTEthernet Networks**

A. Finzi

11:45–12:10 **On Security-Performance Trade-offs of MACsec in TSN-based Networks**

M. Guettatfi, A. Mifdaoui, M. Dehez-Clementi, T. Leydier

12:10–12:35 **MAPS: Mobility-Aware Pre-Subscription for Content-Centric Data Delivery for 5G Teleoperated Driving**

K. Yu, L. Cerny, H. Lin, C. Shih

12:35–13:00 **Beamforming in Multi-User Wireless Systems with Data Rate Guarantees**

M. Lenka, C. Gao, A. Easwaran

13:00–14:30 Lunch Break

14:30–15:20 **Session 7 – Wireless and Mobility-Aware Real-Time Systems**

14:30–14:55 **Worst-case travel time analysis for urban air mobility: a lease-based approach**

D. Aláez, W. Wu, L. Indrusiak

14:55–15:20 **Energy-Efficient Scheduling of Time-Sensitive Packets in Long-Range Wireless Networks with Passive Gateways**

M. Boing, L. Indrusiak

15:20–15:35 **Awards & Closing Session**

15:35–15:55 Farewell Coffee Break

16:30 **Optional Farewell Tour – Halle aux Machines**

For attendees staying in Toulouse for the weekend