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ECRTS

July 7-10, 2020, Modena, Italy

ECRTS is the premier European venue for presenting research into the broad area of real-time systems. With RTSS and RTAS, ECRTS ranks as one of the top three international conferences on this topic. ECRTS has been at the forefront of recent innovations in the real-time community such as **artifact evaluation** and **open access** proceedings.

SCOPE AND TOPICS OF INTEREST

Papers on **all aspects of real-time systems** are welcome. This covers not only hard real-time systems but also time-sensitive systems in general. Typical applications are found in the classical domains of embedded and cyber-physical systems but also beyond, and include automotive, avionics, telecommunications, healthcare, robotics, space, etc. **To be in scope, papers must address some form of timing requirement.**

We welcome **theoretical and practical contributions** (including tools, benchmarks and case studies) to the state of the art in the design, implementation, verification and validation of real-time systems. This includes, but is not limited to: scheduling design and analysis, real-time operating systems, memory management and bus contention, worst-case execution time analysis, networks and communication protocols, formal models and analysis techniques for real-time systems, interplay between real-time and other aspects (security, safety, control, power/energy/thermal management, etc.), hardware/software co-design, programming languages and compilers.

This year, we invite specifically papers focusing on improving the resilience of real-time and embedded systems against accidental and malicious faults.

The models, assumptions and application scenarios used in the paper must be properly motivated. Whenever relevant, we strongly encourage authors to present experimental results (preferably based on real data, but synthetic test cases are permitted) and/or to demonstrate applicability of their approach to real systems. We encourage open-source initiatives and computer-assisted proofs in order to increase confidence in practical and theoretical results and to improve their reusability.

CONFERENCE HIGHLIGHTS

ECRTS 2020 will feature a number of *Satellite Workshops*, a session on *Industrial Challenges*, *Work-In-Progress*, *Journal-to-Conference* presentations and extends a special welcome for first-time attendees. ECRTS will also award best and outstanding papers accepted at the conference.

PAPER SUBMISSION

Please read the **author information** on our website carefully before submitting a paper. All accepted papers will be published again this year under **open access** in collaboration with LIPIcs (Leibniz International Proceedings in Informatics), with no additional costs. Authors of accepted papers with a computational component will be invited to submit their code and/or their data to an optional **artifact evaluation** process.

LOCAL INFORMATION

Modena is a city of Emilia-Romagna, a region of northern Italy, with a population of 180 thousand people. It's an ancient town but today it is known for its automotive industry and its cuisine. Since the factories of the famous Italian sports car makers Ferrari, De Tomaso, Lamborghini, Pagani, and Maserati are located here and all, except Lamborghini, have headquarters in the city or nearby, the region is also known as the MotorValley of Italy. Its culinary hallmarks range from humble but beloved "gnocco fritto" (fried dough) to the celebrated restaurant Osteria Franciscana run by Massimo Bottura, heralded as the best in the world. The University of Modena, founded in 1175 is the second oldest athenaeum in Italy and one of the oldest universities in the world. Regarding culture, the Cathedral of Modena, the Torre della Ghirlandina and Piazza Grande are a UNESCO World Heritage Site since 1997, while regarding music, the city gave birth to classical tenor Pavarotti but also to the rocker Vasco Rossi.

ecrts.org

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IMPORTANT DATES

Submission deadline
February 6, 2020 (UTC-12)

Workshops
July 7, 2020

Conference
July 8-10, 2020

PROGRAM COMMITTEE: Benny Akesson, Sebastian Altmeyer, Sanjoy Baruah, Andrea Bastoni, Marko Bertogna, Timothy Bourke, Björn Brandenburg, Francisco J. Cazorla, Johan Eker, Rolf Ernst, Nathan Fisher, Gerhard Fohler, Steve Goddard, Joël Goossens, Angeliki Kritikakou, Adam Lackorzynski, George Lima, Martina Maggio, Geoffrey Nelissen, Ramon Sema Oliver, Claire Pagetti, Alessandro Vittorio Papadopoulos, Isabelle Puaut, Rodolfo Pellizzoni, Sophie Quinton, Gordana Rakic, Christine Rochange, Jean-Luc Scharbag, Patrick Meumeu Yomsi, Dirk Ziegenbein