

Fifth Workshop on Next Generation Real-Time Embedded Systems

NG-RES 2024, January 17–19, 2024, Munich, Germany

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■ Preface

On behalf of the Technical Program Committee, we are pleased to welcome you to the Proceedings of the 5th Edition of the Workshop on Next Generation Real-Time Embedded Systems (NG-RES 2024), which was held on January 19, 2024 in Munich, Germany. The NG-RES workshop series focuses on real-time embedded systems, with an emphasis on distributed and parallel aspects. NG-RES serves as a platform for collaboration between the networking and multicore real-time communities and promotes cross-fertilization and multidisciplinary approaches to embedded systems design.

Key topics of interest for NG-RES 2024 included, but are not limited to:

- Application of formal methods to distributed and/or parallel real-time systems
- Programming models, paradigms and frameworks for real-time computation on parallel and heterogeneous architectures
- Applications of approximate computing in real-time systems
- Compiler-assisted solutions for distributed and/or parallel real-time systems
- Middlewares for distributed and/or parallel real-time systems
- Networking protocols and services (e.g., clock synchronization) for distributed real-time embedded systems
- Scheduling and schedulability analysis for distributed and/or parallel real-time systems
- System-level software and technologies (e.g. RTOSs, hypervisors, separation kernels, virtualization) for parallel and heterogeneous architectures

We express our gratitude to everyone involved in the organization of the workshop. Our special thanks go to the General Chair Federico Terraneo, Submission and Web Chair Daniele Cattaneo and sincere appreciation to the members of the Program Committee. Their dedicated support was crucial in putting together the workshop program and we thank you all.


Finally, a big thank you goes to all the authors who contributed to NG-RES 2024 with their work. Their valuable contributions make this workshop possible. We hope you will enjoy the event!

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