33rd Euromicro Conference on Real-Time Systems

ECRTS 2021, July 5–9, 2021, Virtual Conference

Edited by

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Preface

Message from the Chairs

It is our pleasure to welcome you to ECRTS 2021, the second — and hopefully last — fully virtual instance of the conference. ECRTS is the premier European conference series in the area of real-time systems and, alongside RTSS and RTAS, ranks as one of the top three international conferences on this topic.

As we all wait for travel and life in general to normalize again, we are delighted to have you join us for an exciting online program consisting of both scientific talks and opportunities for socializing and networking. The centerpiece of the program will be a series of live presentations introducing new results spanning the entire domain of real-time systems, from algorithmic foundations to applied systems.

ECRTS 2021 received a total of 84 submissions from Asia, Europe, and North America. Each submission was reviewed by at least three expert members of the program committee (PC) and discussed at a virtual PC meeting that took place on April 19 and 20, 2021. Ultimately, the PC decided to accept 16 papers for publication and presentation, which translates to an acceptance rate of 19%.

ECRTS has been at the forefront of recent innovations in the real-time systems community such as artifact evaluation and open-access proceedings. Continuing its tradition of innovation, ECRTS trialed a flexible page limit this year. We believe that scientists should focus on the content of their papers, and not worry too much about formatting tricks and layout micro-optimizations to squeeze the last few paragraphs under a given hard page limit. Authors should invest their time into making their manuscripts more compelling and more appealing to readers, not into fighting LaTeX to comply with ultimately somewhat arbitrary page limits. In this spirit, rather than policing formatting violations "with an iron fist," the flexible page limit introduced this year aimed at reducing the incentive for space hacks in the first place by giving authors the option to submit manuscripts exceeding the typical length of 15-18 pages of content.

As the flexible page limit is a "new feature" without precedent in the community, cautious rules were put in place. These rules required authors to provide a short justification of their need for extra pages, and to obtain *a priori* permission from the PC Chair to submit a manuscript exceeding the 18-page soft limit. Similarly, the policy allowed authors to request additional pages for the camera-ready versions of their papers. This allowed reviewers and shepherds to ask for expanded discussions, and gave authors the liberty to address reviewer feedback fully even if it required additional space. The resulting variation in paper lengths is reflected in these proceedings.

Ultimately, 9 out of 84 submissions made use of the flexible page policy to submit manuscripts exceeding 18 pages of content (10.7%). Among the 16 papers accepted for publication, 2 comprised more than 18 pages of content at the time of submission (12.5%). It should be noted that the flexible page limit did not result in excessive amounts of content that would have exceeded the limits or nature of a conference paper, which is perhaps not surprising as concision is of course a hallmark of good academic writing.

Overall, we believe that the flexible page policy is a success in two ways: the PC was freed from concerning itself with formatting minutiae and the policy made a positive difference for some of the authors who opted to make use of it. However, uptake by the community was

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more subdued than expected. As of now, it is still undecided whether the page limit will remain flexible (in a revised manner) in future years, or wether the conference series will revert to a more traditional hard limit.

Double-blind peer reviewing is another innovation successfully adopted in 2021, meaning that authors submitted blinded manuscripts that left reviewers unaware of the names and affiliations of the authors. As a result, all major conferences of the real-time systems community now follow a largely similar double-blind peer-reviewing process, which we welcome as significant community-wide change for the better that has been accomplished in just a few short years, thanks to the efforts by many in the community. We are thankful to have had the opportunity to play a small role in this transition and are hopeful that it will promote the fairness and the meritocratic nature of the evaluation process.

A major conference such as ECRTS rests on many shoulders. First of all, we thank the PC members for their hard work and outstanding service, and in particular for delivering high-quality reviews on time despite a very tight timeline and all the burdens of a strange and difficult year. Similarly, we are grateful to all external and secondary reviewers, who provided many valuable perspectives and important feedback. We are especially grateful to those PC members and additional reviewers who went "above and beyond" serving as anonymous shepherds — you know who you are. We would also like to extend our thanks to the Artifact Evaluation Chairs Alessandro Biondi and Angeliki Kritikakou and their board of Artifact Evaluators for running the AE process. Finally, we thank the new Euromicro Real-Time Technical Committee (TC) for its trust in us and their valuable guidance along the way.

Our very special thanks go to the former, long-serving Euromicro Real-Time TC Chair Gerhard Fohler for making ECRTS what it is today. Thank you, Gerhard! You have built and nurtured something very special here. The new TC will have to work hard to live up to the example you set.

Last but not least, we thank all authors for submitting their work to ECRTS 2021. Whether or not it was ultimately accepted for publication, we deeply appreciate your fine work and the tremendous effort and care that has gone into it; this conference would not be possible without you.

Thanks to the authors, we are looking forward to an inspiring, high-quality program. Please join us in enjoying both the science and everything around it — not just despite, but *especially* in these trying times.

Marcus Völp
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