



# CERC 2021

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# Proceedings

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# Preface

Back in 2020, just after the first COVID-19 lockdown, we decided to host CERC 2021, conference that you are currently attending. At that stage, we were hoping to be able to meet face-to-face here in Cork, the city where everything in CERC started.

Even if it was not possible to host an onsite event at the end, it is great that we are able to live stream the conference for the first time and organise virtual networking sessions in addition to the privilege of having great speakers and special track sessions.

CERC is an opportunity to welcome not just our European friends and colleagues, but also those from farther afield. Munster Technological University punches above its weight in the areas of Artificial Intelligence, Cyber security and computer science research in general, principally through National, European and international funds and collaborations. So we believe it is appropriate that CERC is being held again in our University.

We are of course grateful to everyone who submitted a paper; whether your work was selected for presentation or not, if no-one had submitted, we wouldn't have had a conference. For those of you whose work was selected for presentation online, well done!

Along the way, we have been helped greatly by the program committee and my fellow program chairs, particularly: Prof Udo Bleimann and his invaluable support throughout the conference; Prof Huiru Zheng; Prof Ingo Stengel, Dr. Haiying Wang, and Prof Denise Reichel for co-organising the conference. Dirk Burkhardt and Dr. Robert Loew put a great effort into setting up the website and conference management system and preparing the conference programme and proceedings.

We are also extremely grateful to Munster Technological University, Ulster University, Hochschule Karlsruhe and Hochschule Darmstadt for providing invaluable support to the conference.

Finally, we really hope that you all enjoy the conference, that you benefit from the excellent programme that has been assembled, and that you can virtually discover Cork during the virtual coffee breaks.

Dr Haithem Afli  
Conference and Program Chair, CERC 2021  
Cork, Ireland, September 2021

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