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Matthias F. Carlsohn
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Introduction

The SPIE conference "**Real-time Processing of Image, Depth and Video Information 2023**" hosted by SPIE Optics + Optoelectronics (EOO23) in Prague 24-25 April 2023 was a relaunch of a very successful series of conferences previously organized under the umbrella of SPIE Photonics Europe in Brussels and held as bi-annual conference in 2010, 2012, 2014 and 2016 under the title "Real-time Image and Video Processing" before it was "pulled-back" to the United States under the changed title "Real-time Image Processing and Deep Learning" that led to an unwanted change of scope towards deep learning without addressing real-time aspects, sufficiently.

However, SPIE's Optics + Optoelectronics Conference on "Real-time Processing of Image, Depth and Video Information 2023" program presented an international profile of 16 papers from 14 countries that were retained by four independent reviews of the submissions.

Corresponding papers were presented in a two-day conference from 24-25 April 2023 in Prague (Czech Republic) Europe.

Each paper got its voice, i.e., also for posters a slam session was provided for short introductions.

Finally, two best papers had been awarded, one in the course of SPIE's best student paper award competition that needed several formal steps in advance from the candidates to be eligible and one best paper award were all presenters were potentially eligible and their work could be considered according to the content and the quality of their oral presentations. Papers had been judged based on clarity of presentation, scientific merit, and potential innovative impact. The Best Student Paper Award will consist of a certificate, a cash prize, SPIE student membership and a certain amount of SPIE Digital Library downloads. Theimagingsource Europe's best paper award is associated with a cash reward donated by Theimagingsource Europe GmbH Bremen and an award certificate as well!

The winner of SPIE's Best Student Paper Award 2023 is Ellen C. Daly for her presentation of the paper "Development of light-field motion tracking technology for use in laboratory studies of planet formation" for which we congratulate and wish her success in continuing her research work in this emerging field.

Theimagingsource Europe Best Paper Award had been assigned to Sepehr Elahi for the presentation of his paper "Real-time 3D tracking of a microparticle using chromatic aberration". With our congratulations we wish him great success for his future research and hope to see his scientific work further evolving.

Compared to our sister conference at SPIE's DCS Conference on Real-time Image Processing and Deep Learning a one-day conference on 1 May 2023 in Orlando (FL) USA another 20 papers from five countries were presented, EOO23's conference demonstrated its wide international acceptance by a great diversity of contributions coming from all parts of the world, which underpins its claim for an annual repetition of this conference in Europe.

The conference was organized in four sessions plus a poster session:

Session 1: Real-time Imaging

Session 2: Light Field Imaging

Session 3: Machine Learning and AI

Session 4: Sensing and Coding

Thanks are dedicated to the Technical Committee for stimulating submissions but also for supporting the review process before and after the conference. Here in particular, I would like to thank my young colleague Viktor Schneider from The University of Hannover for accompanying me in all steps of the preparation of this conference the reason why I would like to nominate him as co-chair for the next conference.

A particular and very personal thank is given to my colleague Prof. Koorosh Khodabandehloo, who I met again after 31 years in person because he interrupted his flight from the United States to Australia to provide an exceptional overview about real-time aspects in robotics for food industry where he is delivering pioneering work since more than four decades.

Overall, the community of real-time image processing experts enjoyed a well-balanced program of presentations from various fields of applications and contributed to the claim made for organizing this conference annually in Europe again, i.e., next time very likely 2024 in Strasbourg hosted under the umbrella of Photonics Europe.

Finally, I want to invite colleagues to take over the responsibility for organizing this event in the long-term future as leading scientific chair. For the time of transition, I will be available as co-chair or shadow chair whatever is more convenient. Please contact me with your expression of interest either by email: Matthias.carlsohn@t-online.de or via the "Special Interest Group for Real-time Processing of Image, Depth and Video Information" under https://www.linkedin.com/groups/8118079/ in LinkedIn that is the social backbone of this scientific community.

Matthias F. Carlsohn