

INTRODUCTION TO LIM FROM THE SERIES CHAIR

THE IS&T LONDON IMAGING MEETING: FUTURE COLOUR IMAGING

The London Imaging Meeting is a yearly topics-based conference organized by the Society of Imaging Science and technology (IS&T), in collaboration with the Institute of Physics (IOP) and the Royal Photographic Society. This year's topic was "Imaging for Deep Learning".

At the heart of our conference were five focal talks given by world-renowned experts in the field (who then also organised the related sessions). Focal speakers were Dr. Seyed Ali Amirshahi, NTNU, Norway (Image Quality); Prof. Jonas Unger, Linköping University, Sweden (Datasets for Deep Learning); Prof. Simone Bianco, Università degli Studi di Milano-Bicocca, Italy (Color Constancy); Dr. Valentina Donzella, University of Warwick, UK (Imaging Performance); and Dr. Ray Ptucha, Apple Inc. US (Characterization and Optimization).

We also had two superb keynote speakers. Thanks to Dr. Robin Jenkin, Nvidia, for his talk on "Camera Metrics for Autonomous Vision" and to Dr. Joyce Farrell, Stanford University, for her talk on "Soft Prototyping Camera Designs for Autonomous Driving". As a new innovation this year—and to support the remit of LIM to reach out to students in the field—we included an invited tutorial research lecture. Given by Prof. Stephen Westland, University of Leeds, the presentation titled "Using Imaging Data for Efficient Colour Design" looked at deep learning techniques in the field of design and demonstrated that simple applications of deep learning can deliver excellent results.

There were many strong contenders for the LIM Best Paper Award. Noteworthy, honourable mentions include "Portrait Quality

Assessment using Multi-scale CNN", N. Chahine and S. Belkarfa, DXOMARK; "HDR4CV: High dynamic range dataset with adversarial illumination for testing computer vision methods", P. Hanjil *et al.*, University of Cambridge; "Natural Scene Derived Camera Edge Spatial Frequency Response for Autonomous Vision Systems", O. van Zwanenberg *et al.*, University of Westminster; and "Towards a Generic Neural Network Architecture for Approximating Tone Mapping Algorithms", J. McVey and G. Finlayson, University of East Anglia. But, by a unanimous vote, this year's Best Paper was awarded to "Impact of the Windshield's Optical Aberrations on Visual Range Camera-based Classification Tasks Performed by CNNs", C. Krebs, P. Müller, and A. Braun, (Hochschule Düsseldorf) (University of Applied Sciences Düsseldorf), Germany.

We thank everyone who helped make LIM a success including the IS&T office, and the LIM presenters, reviewers, focal speakers, and keynotes, as well as the audience, who participated in making the event engaging and vibrant. This year, the conference was run by the IOP and we are extremely grateful for their help in hosting the event. A final special thanks go to the Engineering and Physical Sciences Research Council (EPSRC) who provided funding through the grant EP/S028730/1.

Finally, we are pleased to announce that next year's LIM conference will be in the area of "Displays"; the conference chair is Dr. Rafal Mantiuk, University of Cambridge.

—Prof. Graham Finlayson, LIM series chair, and Prof. Sophie Triantaphillidou, LIM2021 conference chair